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ABSTRACT

This report presents an overview of the financial aspects of the vocational education and training (VET) system in Germany. It is based on a survey that covered the following issues: (1) the economic, political, legal, and administrative background to the financing of the VET system; (2) the different types of training defined according to the national context; (3) the funding sources (central government, regional or local government, employers, individuals); (4) the mechanisms for the distribution of funding; (5) the expenditure levels over 10 years (1986-96); and (6) the trends and perspectives in the funding of vocational training systems. The report is organized into 10 parts. Part 1 covers the background to vocational training. Part 2 summarizes the funding of initial vocational training. Part 3 is an overview of continuing vocational training. Part 4 focuses on initial and continuing training for the unemployed. Part 5 looks at combined training programs (education and on-the-job training). Part 6 forecasts the future of vocational education and training funding in Germany. Parts 7-10 provide a list of abbreviations and German institutions, legal provisions, a glossary defining 28 terms, and a bibliography listing 94 references. (Contains 18 tables and 6 figures.) (KC)

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The financing of vocational education and training in Germany

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The financing of vocational education and training in Germany

Financing portrait

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Foreword by Sarah Elson-Rogers/Sven-Åge Westphalen

At the end of 1997, Cedefop launched a project to produce financing portraits of the vocational education and training (VET) systems within the individual Member States of the European Union. The portraits combine a qualitative description of the flow of funding through the VET structures, identifying the funding sources and allocation mechanisms, with quantitative data on expenditure for different training types. The reports are structured around initial vocational training, continuing vocational training and training for unemployed people. In recognition of the increasing overlap among these training types, some of the reports include an extra section on combined forms of training.

At the outset of the project, Cedefop asked the individual national authors to follow a uniform structure for the presentation of their financing training systems. This structure centred on the following issues:

- outlining the economic, political, legal and administrative background to the financing of the VET system;
- defining the different types of training according to the national context;
- identifying the funding sources (e.g. central government, regional/local government, employers, individuals, etc.);
- explaining the mechanisms for the distribution of funding;
- identifying the expenditure levels over 10 years (1986-96 or the most recently available years);
- concluding and discussing the trends and perspectives in the funding of vocational training systems.

The authors were requested, where possible, to distinguish between private/public and direct/indirect funding sources and to identify capital and revenue funding. They were also asked to provide a breakdown of expenditure according to the different sources of funding for each training type over a ten-year period.

While defining a common structure for each report allows for broad comparisons between the different systems and easier cross-referencing between the reports, it does not allow for detailed trans-national comparisons. It was acknowledged at the outset of this project that creating comparable reports would not be possible for a number of reasons, including:

- Training definitions: initial vocational training, continuing vocational training and training for unemployed people means something different within individual national contexts. While creating a 'standard' definition of each training type would have facilitated comparability, it would have complicated the process of gathering and presenting data. For this reason, each author was requested to use a nationally-based definition.

- Data: there are a number of general obstacles to obtaining comparable data, for example: the lack of common definitions, different national accounting procedures and the problems of identifying expenditure where funding sources are diverse and estimates are based on surveys. More specific obstacles include the difficulty of aggregating data where funding is decentralised and estimating indirect sources of expenditure.

A number of barriers to achieving even basic common parameters arose as the work developed. Among others, these included:

- The increasing overlap between the traditional training categories. In some countries the division between the different training types is not as strict as in others. This means that some artificial divisions have had to be drawn by some of the authors, for example, between academic and vocational training. While this overlap may be, in part, the result of a general policy aim to level parity of esteem, it creates challenges in disaggregating data to identify expenditure on the vocational element. The notion of lifelong learning also has implications for creating more coherent training structures which include a wider range of learning activities. It is often difficult to identify and measure expenditure data on training that takes place outside of the formal structure.
- The complexity of financing training structures due to the number of different funding sources and mechanisms for financing VET. For example, levels of expenditure on indirect demand-side mechanisms such as tax incentives are often difficult to identify. More fundamentally, this general complexity is enhanced in those countries where there is no national structure for training, i.e. where local governments have autonomy for financing training.
- The number of recent reforms to the financing VET system blur data comparability over time within individual Member States. The newness of many of these reforms means that there is often a lack of stringent evaluation according to efficiency, effectiveness and equity criteria.

There was no ideal way to create common criteria for the structure of this series of reports. There is a certain trade-off between attaining a common structure and reflecting the nuances of the individual national training systems. Nevertheless, this first set of portraits does serve to highlight many of the complexities involved with the financing of vocational education and training across the European Union. We hope you find the portraits informative and welcome your comments.

Our thanks go to Stefan Hummelsheim and Professor Dr Dieter Timmermann of the University of Bielefeld, the authors of this report on the funding of vocational education and training in Germany.

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Preface by the authors

This profile of the *Structures of Vocational Education and Training Funding in Germany* was commissioned by the European Centre for the Development of Vocational Training (Cedefop) and compiled at the Faculty of Education of Bielefeld University. The interim and final reports were submitted for review to the German Cedefop Management Board members in August 1998 and January 1999, respectively. The report was completed at the beginning of January 1999.

The term vocational training is not clearly defined in Germany. This funding profile uses the term vocational training as a generic term to denote both initial vocational training and continuing vocational training. Initial vocational training is considered to be vocational programmes which a) as a rule are intended for school leavers and provide skills directly relevant to the labour market, or b) are acquired in a regulated, formal course of training and lead to qualification as a skilled worker or to basic qualifications for a wider field of work.[1] Thus continuing vocational training comprises those qualifications which are a continuation or resumption of organised learning after completion of an initial phase of training. It can be either a) further training leading to upgraded skills or promotion in a current occupation, or b) retraining for a new occupation.[2] Tertiary education has been excluded from this study.

The basic method employed to obtain the funding profile was an analysis of secondary literature and available secondary statistical data. Attempts were also made to tap the resources of institutions which could be assumed to hold data on expenditure, costs and funding for the benchmark years 1986, 1991 and 1996, and for the observation units initial training, continuing vocational training and combined programmes covering initial and continuing training and placement. Enquiries at the Federal Office of Statistics, the statistics offices of the *Länder*, the relevant federal and *Länder* ministries, the *Länder* and city parliaments, economics institutes or other institutions did not furnish any useful data. Therefore the data compiled in this study is based almost entirely on secondary analysis of statistics. This includes *Grund- und Strukturdaten* (Basic and Structural Data), *Berufsbildungsbericht* (Vocational Training Report), the series *Bildung im Zahlenspiegel* (Education in Figures), *Berichtssystem Weiterbildung* (Report System Continuing Training), *Rechnungsergebnissen der öffentlichen Haushalte* (Public Budget Accounts), *Geschäftsberichten der Bundesanstalt für Arbeit* (Annual Reports of the Federal Labour Office) and occasional random sample surveys by the Institute of the German Economy and the Federal Institute for Vocational Training. Cedefop's understandable desire for highly aggregated macro-economic data allowing comparisons between countries presents empirical and theoretical problems. Empirically, the problem is that incomplete vocational training statistics in Germany allow only limited insight into expenditure, cost

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1 Cf. Münch 1994, p. 36; cf. Vocational Education and Training Law 1969.

2 Cf. Dikau 1995, p. 428; cf. Vocational Training Act 1969; cf. also Promotion of Labour Reform Law 1998.

and funding structures for the benchmark years and observation units, since empirically reliable data to verify structures of funding identified in theory were frequently not available or were incomplete. The theoretical problem is that public expenditure must be added to company costs to obtain total macro-economic funding, although, in principle, the two should not be added together. The two systems of accounting refer to fundamentally different principles of transaction, since public expenditure accounts cover the acquisition of resources, while cost accounting covers the exploitation of resources.[3] Where macro-economic data on the total volume of funding for observation units in this profile do add together public budget expenditure accounts and company costing accounts, it was at the specific request of Cedefop. It is clear from these methodological problem areas that the data should be interpreted with caution.[4]

ECU were translated to DM at the average rate of exchange for December 1998, which was DM 1.960280 (rounded down to 1.96).

The socio-economic situation described below has significant implications for the funding and production of vocational education and training in Germany. In the first place, the existing system of funding must be seen as a historically rooted structure of private-business and public responsibility. As a result, vocational education and training subsystems have developed with differing regulations, administration and funding, which are distinctive of the German, Austrian and Swiss systems. In the second place, conflicts between the goals of efficiency and fairness, as the main objectives in funding vocational education and training, are inevitable. These conflicts can apparently only be resolved in political debate with all the players involved. In the third place, all else being equal, the present economic trend means that meeting the demand for vocational education and training will continue to be a political issue. The demand for initial training is expected to increase in the short and medium term, up to the year 2010, and the demand for continuing training will probably increase sharply in the long term due to demographic factors which suggest that there will be fewer school-leavers in future. Another important question as far as the funding of vocational training is concerned is the extent to which the increasingly dominant service sector in the economy can solve the compensation and absorption problems on the labour market. In view of the importance of skills production as a production site factor, coupled with problems of individual loss of skills due to unemployment, a decision must be reached on how to reflect, or where possible anticipate, this development in allocating resources for initial and continuing training. In the fourth place, this leads to the key question facing vocational training funding: will it be possible, in spite of the limited statistical basis for decisions, not only to coordinate a comprehensively regulated system of initial training with a more haphazard system of continuing training, but also to prepare them for future developments?

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[3] Surprisingly, this problem is seldom considered in the literature, and it is common practice in the literature of education economics to add public spending and company costs. Cf. Timmermann 1994, p. 40, for discussion of this methodological problem; cf. also criticism by Schmidt 1990, p. 93.

[4] Cf. section 1.5. for detailed discussion.

Finally, we would like to take this opportunity to thank Markus Walber for designing the graphics and Odette Jansen for her help with editing.

Bielefeld, January 1999

Part 1 Background to the funding of vocational education and training

1.1 Political background

As a democratic society in accordance with the German constitution, the Federal Republic of Germany has committed itself to freedom, justice and prosperity as its highest aims. During its founding phase it opted for a social market economy. The central idea of the social market economy is to combine free enterprise within a competitive economy with social progress, in turn guaranteed by the performance of the market economy.[5] This central idea is reflected in the conviction that a social market economy is most successful when controlled by market forces, with State intervention only as a corrective or supportive measure.

While there is a general consensus among all political groups that State involvement in the vocational education and training system is necessary, the form and scale of this involvement is very much a subject of debate. The role of the State in vocational education and training therefore depends to a considerable extent on how the weaknesses of market forces and political control are perceived and judged politically in the context of social and economic objectives.[6] Apart from this, vocational training in enterprises has developed a third system situated between market and State, in the form of joint control, which traditionally permits substantial influence by the economic and social partners (e.g. on regulation, supervision and examinations). Since the end of the 1940s the German political and legal systems have been characterised by this social partnership, which is not founded on any legal provision, but only on the cooperation of various employee and employer associations with the federal government and *Länder* governments. It has a crucial influence on policies concerning vocational training and the labour market. There is also a distinct cooperative federalism within the State sector. This is not only expressed in the horizontal coordination of *Länder* policies on education and vocational training (cf. the Standing Conference of *Länder* Ministers of Education and Cultural Affairs), but also in substantial vertical cooperation and coordination between the federal and *Länder* governments, e.g. in the Federal and *Länder* Committee for Educational Planning and Research Promotion.

The significant role of the social partnership in the spheres of social and health insurance, pensions, the labour market and vocational training policies is also an expression of the century-old welfare state tradition in Germany, which has led to a well-established and comprehensive social safety net which compares favourably with other countries. Part of this tradition is that the State and quasi-State sectors predominate in matters of education.

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5 Cf. Müller-Armack 1956, p. 390.

6 Cf. Timmermann 1996, pp. 150 et seq.

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In the public consciousness, both education and vocational training, but especially education, are regarded as the responsibility of the government. However, in spite of all the functional problems associated with the dual system, the regulation of supply and demand of apprenticeships is left to market forces.

The relevant policies and objectives of the German social and economic system also serve as central goals in the financing of vocational education and training. Among other things, this means that objectives determining vocational training funding have to be developed from the more general objectives of social and economic policies. General and specific objectives of vocational training funding are needed not only to control, coordinate and monitor political action, but also to represent necessary standards for assessment and evaluation in discussions on the existing system and alternative models of funding.[7]

1.2 Economic background

The Basic Law and the Promotion of Stability and Economic Growth Act (*Gesetz zur Förderung der Stabilität und des Wachstums der Wirtschaft* – StWG)[8] prescribe a social market economy as the economic system in the Federal Republic of Germany. Federal and *Länder* governments must ensure that the needs of the whole society are balanced when deciding economic and budgetary measures. The framework conditions of a social market economy are subject to manifold demographic, economic, labour market and skills structure transformations, with many consequences for the funding and delivery of vocational education and training.

Demographic changes in recent years have been characterised by lower birth rates, stable mortality rates, higher life expectancy and a positive migration balance, and presumably will be in the future, too.[9] Population trend indicators suggest a significant decrease in the number of children and young people between the ages of 6 and 18, shrinking numbers of young people in the 20-to-25-year age cohort – the most important for entrants to the workforce – and a substantial rise in the number of over-65s up to the year 2030. Future generations of the working population will therefore have fewer younger people but more older people to support. Further, the falling proportion of people of working age in the population from the year 2010 may well mean there are too few people to work in certain regions, sectors and occupations. The restructuring of the overall supply of goods and services, demographically determined and demand mediated, will significantly change the structure of the demand for occupational skills. It remains to be seen to what extent the trend towards more education and higher qualifications, accompanied by falling cohort numbers, will affect the demand for vocational education and training.[10]

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7 Cf. Timmermann 1994, pp. 57 et seq.

8 Cf. Promotion of Stability and Economic Growth Act of 8 June 1967.

9 Cf. Kühlewind 1989, pp. 106 et seq.

10 Cf. Klauder 1993, pp. 477 et seq.

Table 1 Overall economic trend based on selected indicators for 1986, 1991, 1996 and 1997

Indicators	1986	1991	1996	1997
Nominal gross domestic product (in millions) a	DM 1 925.290	DM 2 647 600	DM 3 541.500	DM 3 641.800
	ECU 982 291	ECU 1 350.816	ECU 1 806.888	ECU 1 858.061
Real gross domestic product (in millions) a,b	DM 2 186.100	DM 2 647.600	DM 3 054.500	DM 3 121.200
	ECU 1 115.357	ECU 1 350.816	ECU 1 558.418	ECU 1 592.449
Productivity a	1.6%	3.7%	3.0%	3.9%
Rate of inflation a	- 0.2%	3.6%	1.5%	1.8%
National debt (in % of nominal GDP) c	41.6%	41.4%	60.1%	61.0%
Economically active population (in 1000) a,d	29188	30662	38329	38260
Persons in supported employment (in 1000) a,d	26856	29189	34415	33928
Labour force participation rate a	47.8%	47.9%	46.8%	46.6%
Unemployed (in 1000) a	2228	1689	3965	4384
Unemployment rate a, e	9%	6.3%	11.5%	12.7%

Source: 1998 Labour and Social Statistics, No 1.2, 1.7, 1.27, 2.3, 2.4, 2.10, 6.9. Author's calculations. Rounded values.

Legend: a: 1991 refers to the old (western) *Länder*, b: inflation-adjusted values in 1991 prices, c: from 1990 including the 'German Unity' Fund and the Loan Processing Fund, from 1991 including the new (eastern German) *Länder* and east German municipalities, from 1994 including the Federal Railway (*Bundeseisenbahn*) assets and from 1995 including the amortisation fund for debts incurred through unification; d: including soldiers; e: without soldiers.

It is striking that gross domestic product (GDP) rose in real terms from 1991 to 1996, whereas the labour force participation rate fell slightly and the rate of unemployment even increased considerably. At present the future development of the German economy remains unclear, although there is much to indicate that the gap between the economic structures of eastern and western Germany will not close in the short or medium term.

Economic development in Germany is subject to accelerated structural transformation, characterised among other things by changes in the composition or structure of the output of the overall economy according to sector, and the division of the workforce among these sectors and according to skills.[12] The effects of the structural transformation on the structure of the labour market and qualifications in Germany are as varied as the above-mentioned determinants of the structural transformation. The sector transformation indicates a substantial displacement from the primary via the secondary to the tertiary sector. Thus the primary sector's share of the total will fall from 9% in 1970 to a mere 2% in 2010, and the joint share of the private and public tertiary sectors will grow in the same

[12] Cf. Baethge/Baethge/Kinsky 1995, pp. 142 et seq.

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Demographic changes are linked to fundamental structural changes in the German economy and society. This is amply demonstrated by the shrinking of established industries, restructuring in former and new 'industries of the future', growth trends in the service sector, increasing automation and flexibility, decentralisation, streamlining of production and services, and also by markets becoming globalised and ecological. In view of these transformations there is a very broad consensus that, in all sectors and branches of the economy, constant innovation in products and processes has again become a determinant of competitiveness and employment. In this context, more and more people are coming to understand that the innovative and qualitative potential of new technologies and models of organisation are only effective in combination with qualified and motivated employees. For Germany, traditionally poor in raw materials and heavily dependent on importing natural resources and exporting manufactured goods and services, the human capital of the workforce is proving to be the crucial raw material for safeguarding its future as a production site.[11] Table 1 provides insight into economic development in Germany, based on selected economic indicators. However, this insight is of only limited relevance, because following the unification of Germany on 3 October 1990, no data are available on the new *Länder* for the benchmark year 1986 and those for 1991 are of limited value. In addition, the post-reunification economic structure is comparable with the pre-reunification economic situation only to a very limited extent.

[11] Cf. Buttler/Tessaring 1993, pp. 467 et seq.

period from 42% to 58%.[13] The change in the structure of the labour market has caused the rate of structural hard-core unemployment to grow since 1974. This was aggravated by reunification. It primarily affects workers with few or no qualifications, older workers, workers hampered by health problems and foreigners, then specialised occupations in shrinking sectors, and finally structurally weak regions. Table 2 shows the changes in qualifications as revealed by the qualifications structure of those in dependent employment in relation to the International Standard Classification of Education (ISCED).

Table 2 Qualifications structure of people in dependent employment according to ISCED levels in the western German Länder *for 1976, 1991 and projections for 2000 and 2010, in per cent*

	1976 a	1991 a	2000 a b	2010 a b
no training qualifications **ISCED level: -**	34.9	20.2	14.2	10.1
apprenticeship, full-time vocational school **ISCED level: 3**	51.3	59.1	61.6	63.3
specialised, master's or technical school training **ISCED level: 5**	6.5	8.4	9.3	9.8
specialised institution of higher education **ISCED level: 6**	2.2	4.1	4.9	5.6
university degree **ISCED level: 6**	5.1	8.2	9.9	11.1
Total demand for workers	100	100	100	100

Source: Tessaring 1994, p. 11.

Legend: a: dependent employees excluding trainees; b: middle-variant projection. Includes schools of the commercial, health and social systems. Inconsistencies from rounding figures.

The trend reveals falling demand for basic qualifications and a rising demand for higher qualifications. The demand for basic qualifications will fall sharply. The demand for medium-level qualifications will grow slightly, whereby falling demand for some types of work in production-oriented services and changes in patterns of work organisation could offset or even over-compensate for the slight overall rise in demand in the medium term. Therefore, the need for skilled workers will probably stagnate. There is a considerable increase in demand for graduates of higher education. This general trend towards higher qualifications will undoubtedly affect the funding and production of vocational education and training.[14] The effects of the reunification of Germany and the recession of the mid-1990s on this qualifications trend are not reflected in this description, however.

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[13] Cf. Tessaring 1994, pp. 10 et seq. cf. Tessaring 1996, p. 106.

[14] Cf. Weidig 1996, pp. 269 et seq. cf. Weißhuhn/Wahse/König 1994; cf. also Tessaring 1994, pp. 5 et seq.

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1.3 Legal background

The system of vocational education and training funding in Germany is founded on a legal system with differing levels and specifications of regulations.[15]

Initial training in enterprises is regulated by a series of federal Laws and regulations, which affect it directly or indirectly. The most significant framework conditions are the free choice and practice of an occupation, as provided for in the Basic Law (Article 12 (1)) and federal government competence for legislation on out-of-school vocational training. This is also laid down in the Basic Law (Article 72 (1), (2) and Article 74 (1)). The following Laws are also particularly important for the organisation of out-of-school vocational training: the Vocational Education and Training Act of 14.8.1969, amended 25.9.1996; the Crafts Code of 28.12.1965, amended 7.8.1996; the Promotion of Vocational Education and Training Act of 1.1.1982, amended 26.4.1994 and the Instructors' Aptitude Ordinance of 20.4.1972. Continuing vocational training is essentially governed by the Labour Promotion Act (*Arbeitsförderungsgesetz* – AFG) of 25.6.1969, amended 1.4.1997, complemented by regulations in the Industrial Constitution Law and the Youth Protection Act.

Länder legislation forms the legal basis for school education, including vocational schools and the – quantitatively insignificant – private schools. Article 7 (1) in conjunction with Article 30 and Articles 70 to 75 of the Basic Law confers legislative competence in these areas on the *Länder* and thereby constitutes German educational federalism.[16]

Continuing vocational training is legally regulated on both the federal and *Länder* levels. Among the federal laws the following, mentioned above in the context of initial training, are also relevant: the Vocational Education and Training Act, the Employment Promotion Act, the Promotion of Occupational Advancement Act and the Protection of Correspondence Courses Act. Here, too, the Industrial Constitution Law plays a complementary role. In 14 of the 16 *Länder*, Laws on continuing and adult education, passed between 1974 and 1995, regulate primarily general education and – more marginally – continuing vocational education and training. They are supplemented by the school Laws, regulations and framework agreements of all 16 *Länder*, which are responsible for all forms of vocational education in schools. Finally, 11 of the 16 *Länder* have passed Laws on training leave that provide for the short-term release of employees to attend continuing training courses.

1.4 Administrative background

The responsibilities of institutions involved in vocational education and training derive from a specific constitutional regulation. In this connection, federalism is the deciding constitutive characteristic of the German political system.[17]

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15 See summary of legal regulations (Annex 7).

16 Cf. Kell 1995, pp. 384; cf. Dikau 1995, pp. 431 et seq.

17 Cf. Arnold/Marz 1979, pp. 41 et seq.

Historically speaking, in Germany a number of different institutions have assumed responsibility for the organisation and administration of vocational training. Sometimes they cooperate; sometimes they work separately in a complex system.[18]

1. Competent Bodies (*zuständige Stellen*), which are corporate bodies under public law, are responsible for regulating and monitoring training in enterprises. The Vocational Education and Training Act determines which bodies are responsible for enterprise-based training in particular occupations and occupational fields. These are usually the Chambers of Industry, Commerce and Trades for the different industrial and occupational sectors, and the various federal and *Länder* authorities for the public sector. The Competent Bodies carry out comprehensive monitoring, promotion, licensing, recognition and examination tasks.

2. The vocational training committees of the Competent Bodies comprise six representatives each from employers and employees, and six vocational school teachers as consultative members. The committees for vocational training are responsible for all questions relating to their special fields and are empowered to make recommendations and decisions.

3. The *Länder* committees for vocational training are composed of the same number of delegates from employers, employees and the highest *Länder* authorities. The *Länder* committees are coordinating institutions for the *Länder* governments. They act in an advisory capacity and their decisions are not binding on their target groups.

4. The competent *Länder* ministries – the Ministries of Labour, Finance or, more rarely, the Ministry for Cultural Affairs, depending on the *Land* – supervise the Competent Bodies of the private sector, and also decide on financial support from *Länder* governments for enterprise-based training.

5. The Federal Ministry for Education, Science, Research and Technology (hereinafter 'Ministry of Education') has a general coordinating competence for vocational training. Other ministries are empowered to grant or rescind recognition of training occupations in agreement with the Ministry of Education.

6. The Federal Institute for Vocational Education and Training, as a federal public law body, is supervised by the Federal Ministry of Education. Its primary function is to advise and make recommendations on the promotion, planning and further development of vocational education and training.

7. The Federal Labour Office is an autonomous, indirect federal public law body under the Promotion of Labour Reform Act, responsible for diverse tasks such as career guidance, placement, allocating unemployment benefits and promoting vocational education and training.

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[18] Cf. Kell 1995, pp. 384 et seq.

8. Owing to the cultural sovereignty of the *Länder,*[19] the Culture, Science and School ministries are responsible on the regional level for vocational education in schools. The Federal and *Länder* Committee for Educational Planning and Research Promotion and the Standing Conference of *Länder* Ministers of Education and Cultural Affairs strive for at least a modicum of uniformity and comparability in the federally structured vocational school system and try to stimulate innovations.[20]

9. Public funding of the educational institutions follows budgetary law; i.e. cameralistics (*'Kameralistik'*) subject the individual institutions to restrictions regarding the time frame and use of their public funds. Direct public financial support of pupils and trainees is limited to payment of child allowance, grants under the Federal Education and Training Promotion Act (*Bundesausbildungsförderungsgesetz* – BaföG), which are subject to certain conditions, and in North-Rhine Westphalia also mobility allowances for trainees. Indirect public subsidies for persons undergoing training are allocated through tax exemptions, exemption from school fees, and subsidies for learning materials and transportation, subject to certain criteria. Federal, *Länder* and local governments have some tax revenue of their own. Other revenue from certain taxes is divided up according to particular quotas. Vertical fiscal equalisation has been arranged to harmonise the purchasing power of federation, regions and municipalities, and horizontal fiscal equalisation has been instituted between the various *Länder.* In general, the principle of non-profit is valid, whereby all revenue is used to cover all expenditure.[21]

1.5 Statistical background to vocational training

German vocational training statistics are unsatisfactory, not only in comparison with other European countries, but also in contrast to other federal statistics.[22] In view of the growing importance of vocational education and training, political players are expressing a greater need for reliable statistics. However, official national statistics are not available. Consumers of vocational training statistics face a number of limitations. Firstly, the traditionally federal structure of the vocational training landscape in the Federal Republic of Germany hampers a differentiated but aggregate calculation and presentation of expenditure, cost and financing structures. In addition, no data for 1986 and few reliable data for 1991 are available from the new [eastern German] *Länder.* Further, the Federal and *Länder* Committee for Educational Planning and Research Promotion decided on 25 March 1996 that no more financial data would be compiled for the regions. Also, information on company expenditure on vocational education and training is limited to

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19 Cf. section 1.4.

20 Cf. Arnold/Münch 1995, pp. 38 et seq.

21 Cf. for details Mäding 1984, pp. 264 et seq.

22 Cf. for details of official statistics Chlumsky/Wiegert 1993; cf. also Hoffmann 1994; cf. for company statistics Kath 1996, pp. 269 et seq. cf. also Weiß 1997, pp. 3 et seq.

occasional random-sample surveys. Moreover, data on private spending by participants in vocational training are available only from a single random sample by the Federal Institute for Vocational Education and Training.

It is evident that there are no uniform delimitation or definitions of the present subjects of study or observation units which would apply equally to all the private and public institutions involved and all levels of investigation, i.e. federal, *Länder* and municipal (criterion for operationalisation). Apart from this, due to reporting weaknesses, the data collected are not always really those which are supposed to be collected. For example, in the sphere of official statistics, data on vocational training are assigned to various so-called title groups, which can only be divided up again with difficulty (validity criterion). Over and above this, it has proved difficult to provide data which actually describe what they are supposed to describe. Thus, in the first place, official statistics on spending usually record target figures, which do not correspond to actual spending. Further, it is not permissible to add together spending from official cameralistics and private expenditure from the business accounting system (reliability criterion).[23] Finally, the process of investigation itself is frequently the subject of scientific and political controversy. For example, publications on the cost of in-company further training by the Federal Institute for Vocational Education and Training and the Institute of the German Economy from the early 1990s provoked controversy about the objectivity of their procedures and evaluations and thus their methodological relevance (criterion of objectivity).[24] There is an urgent need for a systematic and constant development of fundamental statistical methods and procedures for determining monetary transactions in the German vocational training system.[25]

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[23] Cf. comments in the Preface.

[24] Cf. Grünewald/Moraal 1995, pp. 5 et seq. cf. Schmidt 1995a, pp. 680 et seq. cf. Schmidt 1995b, pp. 867 et seq. cf. Weiß 1996a, pp. 103 et seq.

[25] Cf. Weiß 1992, pp. 49 et seq. cf. Tessaring 1996, pp. 128 et seq. cf. Schmidt 1990, p. 96.

Part 2 Initial vocational training

2.1 Specific background

In Germany, young people usually undergo initial vocational training in one of two subsystems. One is the dual system, a specific combination of enterprise-based training and vocational school, although with multiple forms of organisation and funding. The other is full-time vocational school. This can be a basic vocational education year, a preparatory vocational school year, or enrolment in a vocational extension school (*Berufsaufbauschule*), higher vocational school (*Berufsoberschule*), full-time vocational school (*Berufsfachschule*), higher technical school (*Fachoberschule*), specialised institute (*Fachschule*), specialised grammar school (*Fachgymnasie*), college school (*Kollegschule*) or a new institution, the vocational college (*Berufskolleg*). All schools providing vocational education, whether full-time or part-time as part of the dual system, are referred to as vocational or vocational training schools, and, as a rule, have a shared management under one roof.

Under the dual system in Germany, individual enterprises provide the bulk of funding for in-plant training. Various alternative forms of financing for enterprise-based training are under discussion, such as financing for school-based training, financing through sector training funds and cooperative funding. These do not replace financing by individual enterprises, but increasingly supplement it. No fundamental change in the system has yet materialised, although the debate about enterprise-based training is rekindled at regular intervals. It is currently being conducted against the backdrop of plans to achieve a balance between demand for training places and supply, which has decreased significantly since the early 1990s. Table 3 shows the trend in training places available in enterprises and the trend in the demand for training places in the years 1986, 1991, 1996 and 1997.

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Table 3 Total number of trainees, supply of training places in enterprises and demand on the training market for 1986, 1991, 1996 and 1997

	1986	1991	1996	1997
Total number of trainees	1 805 200 a	1 430 200 a	1 240 600 a	-
			351 700 b	-
			1 592 200 c	-
Supply	715 880 a	668 000 a	483 180 a	487 017 a
			126 109 b	126 336 b
			609 289 c	613 353 c
Demand	730 980 a	550 671 a	473 951 a	493 990 a
			138 849 b	140 920 b
			612 800 c	634 910 c
Supply:demand ratio	97.8 a	121.3 a	101.9 a	98.6 a
			90.8 b	89.7 b
			99.4 c	96.6 c

Source: 1997/98 Basic and Structural Data, p. 112; 1998 Vocational Training Report, p. 11.

Legend: a: old [West German] *Länder*; b: new [East German] *Länder*; c: all of Germany. No reliable data were available for the new *Länder* for 1991. Owing to different times of implementing special programmes partially funded by federal government, data for the new *Länder* for 1995 and 1996 are not entirely comparable.

At the beginning of this period the supply of training places in West Germany was greater than demand. The gap narrows, however, as the number of openings in enterprises falls while the demand for training for young people starts to grow slightly. Since 1995 the imbalance in the training market has become acute. Whereas the growing number of pupils leaving school after the lower secondary grade are pouring onto the training market, enterprises continue to eliminate training places.[26]

In 1996 the Institute for Labour Market and Occupation Research counted 474 000 enterprises in the old [West German] *Länder*, and just under 100 000 in the new [East German] *Länder*, providing training places. Thus 29% and 26%, respectively, of all enterprises offered training.[27]

Small and medium-sized enterprises, in particular craft trades companies, are important training suppliers, but are unable, or not fully able, to provide all the facets of training required of them by training regulations. This is primarily due to the increasing division of labour in production processes, increasing specialisation, and in some cases financial problems or accelerated technological change. Whereas large enterprises can compensate by providing some of the training in company training workshops outside the

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[26] Cf. commentary in Brandes/Walden 1997, pp. 24 et seq. cf. 1997 Report on Vocational Education, pp. 25 et seq. cf. also the reasons given by enterprises for the drop in the number of training places, in Bardeleben 1995, pp. 84 et seq.

[27] Cf. 1998 Report on Vocational Education, pp. 130 et seq.

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production process, small and medium-sized enterprises are unable to do this for organisational and financial reasons. The limited suitability of such enterprises as training providers is compensated for by supplementary external training measures in school-based workshops, in accordance with Paragraph 27 of the Vocational Education and Training Act and Paragraph 23 of the Crafts Code. School-based workshops are of particular importance in the new *Länder*, where many small and medium-sized enterprises are only able to offer training at all thanks to the supplementary training these workshops provide. The school-based workshops are operated mainly by organisations which are either public law bodies (e.g. chambers and guilds) or non-profit-making private law bodies (e.g. trade associations and municipalities). Any institution that offers school-based training courses to supplement enterprise-based training can be termed a school-based workshop.[28]

As a result of the search for alternative funding for enterprise-based training in the early 1970s,[29] some sectors of the economy are subject to generally binding collective agreements on school-based training. They include the building trade (since 1976), the horticultural and landscaping sector (since 1977), stonemasons and stoneworkers (since 1977), the roofing trade (since 1979) and the scaffolding trade (since 1990). The chimneysweep trade has also had equalising funds since 1969. These collective agreements are funded by levies. All enterprises covered by the collective agreement must pay a certain percentage of taxable gross wages and salaries into the fund. The modes of collection of levies and equalisation of burdens between training and non-training enterprises are regulated jointly by the parties to the contract.[30]

In recent years a new form of organising and funding enterprise-based training has developed – cooperative training. A training cooperative is a form of systematic cooperation between enterprises and training institutions in order to improve the supply and quality of enterprise-based initial training.[31] The legal basis for these cooperatives is Paragraph 22(2) of the Vocational Education and Training Act, which explicitly provides for cooperation between various enterprises and educational institutions without, however, prescribing how this cooperation should be organised or financed. Whereas the main function of training cooperatives in the 1980s was to offset the shortage of openings and tap latent training capacities, they have now primarily become instruments for improving the quality of training in enterprises lacking the capacity to provide training alone, owing to their degree of specialisation.

In general it is apparent that a number of alternative types of organisation and funding have developed under the heading 'enterprise-based training'.[32]

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[28] Cf. Beicht/Holzschuh/Wiederhold 1989, pp. 1 et seq.

[29] Cf. fundamental paper by the Committee of Experts (*Sachverständigenkommission*), 1974.

[30] Cf. Kath 1996, pp. 288 et seq.

[31] Cf. Schwiedrzik 1988, p. 1.

[32] Cf. Schwiedrzik 1988, p. 6; cf. also Kath 1996, pp. 292 et seq.

In Germany, a distinction is made between schools providing general education and vocational schools. In turn, vocational schools are classified according to whether or not they are part of the dual system.[33] The part-time vocational schools of the dual system are the best known type of vocational school. Together with training enterprises, they have been absorbing 60 to 70 per cent of school-leavers each year since the mid-1980s. It is their task to reinforce pupils' general education and provide specialised instruction for the target occupation. As a rule, young people attend these schools after nine or ten years of compulsory full-time general education, while under contract for initial training. The trainees are 18 or under when they enrol (21 or under in North-Rhine/Westphalia). The obligatory instruction is given on a part-time basis, two days a week at the most, or in blocks. Table 4 shows the numbers of pupils in all types of vocational schools.

Table 4 Numbers of pupils in vocational schools, 1986/87, 1991/92, 1996/97 and 1997/98

	1986/87 a	1991/92 b	1996/97 b	1997/98 b, g
Part-time vocational schools c, d	1 972 139	1 816 469	1 730 590	1 758 970
Vocational extension schools	8 132	7 938	2 851	2 551
Full-time specialised vocational schools	318 640	248 856	330 020	355 376
Higher specialised schools	75 557	76 495	81 679	83 975
Specialised grammar schools	120 649	138 625	171 582	175 890
Vocational/technical high schools	3 859	5 538	3 743	7 667
Specialised institutes f	101 846	154 362	159 119	155 575
Total	2 600 822	2 448 283	2 479 584	2 540 004

Source: Education in Figures 1998, p. 76.

Legend: a: old [West German] *Länder*; b: all of Germany; c: from 1996/97 vocational schools in the dual system (including basic vocational education year in cooperative type); d: including the preparatory vocational year and basic vocational education year; e: in North-Rhine/Westphalia as college schools; f: from 1996/97 including specialised academies in Bavaria; g: official interim result.

The table illustrates the dominance of the (part-time) vocational school. Over 1.7 million pupils, or approximately two thirds of all pupils in vocational schools, attended part-time vocational schools in the 1997/98 school year. It should be borne in mind that no direct conclusions as to the condition of training in the dual system can be drawn from the number of pupils in part-time vocational schools, since the enrolment includes young people who do not have a training contract.[34] In addition, the preparatory vocational year and basic vocational education year are included in this category, plus, from the school year 1996/97, the basic vocational education year in the cooperative form.

[33] Cf. Timmermann 1994, pp. 57.

[34] Cf. Kakies/Lehmpfuhl/Miethner 1998, p. 136.

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In addition to the part-time vocational schools, a sub-sector of mostly full-time vocational schools has developed since the mid-1970s. They offer a large and growing number of vocational training courses. The new institutions sometimes compete with the dual system, but more often they provide preliminary courses facilitating access to the dual system (e.g. preparatory vocational year and basic vocational education year). They train young people for occupations outside the dual system, for example in the social, childcare and health sectors (e.g. vocational specialised schools, vocational higher schools, specialised higher schools and specialised grammar schools, schools in the health sector) or they offer a chance for further vocational training (e.g. vocational extension schools and specialised institutes). Successful completion of most of the courses in the full-time vocational schools also confers a specific intermediate level certificate of general education. The college schools founded in North Rhine-Westphalia in the 1970s were a special type of vocational school offering a broad spectrum of vocational courses sometimes conferring both vocational and general education qualifications. Since 1997 they have been reorganised and renamed vocational colleges.

In 1996 there were a total of 9 300 public and 1 511 private vocational schools, including 1 831 public part-time vocational schools and 159 part-time vocational schools run by private organisations.[35]

2.2 Funding of enterprise-based training

2.2.1 Funding by individual enterprises

In-company training in the dual system is usually financed by the individual enterprise, i.e. an enterprise decides autonomously whether it will offer training and in which occupations. It decides how many trainees it will take on, which quality standards will be observed within the legal framework and how much it wants to spend on training. Currently, financing by individual enterprises is in practice a form of pre-financing, balanced by three possible ways of refinancing. These forms comprise tax reductions or exemptions in the case of enterprises making a profit; by passing on training costs to selling prices and thus to the purchaser or by passing back training costs onto factor prices; or by internalising direct and indirect returns, not only during but in particular after training. Thus individual enterprise financing is actually hybrid financing. Apprentices bear the indirect costs as opportunity costs in the form of lost income. Additionally, the State subsidises individual enterprise financing through full or partial funding of existing training places or newly established training places. Further, the State bears opportunity costs in the form of lost tax revenue due to tax reductions and exemptions for enterprises.[36] Figure 1 shows financial flows of training in individual enterprises.

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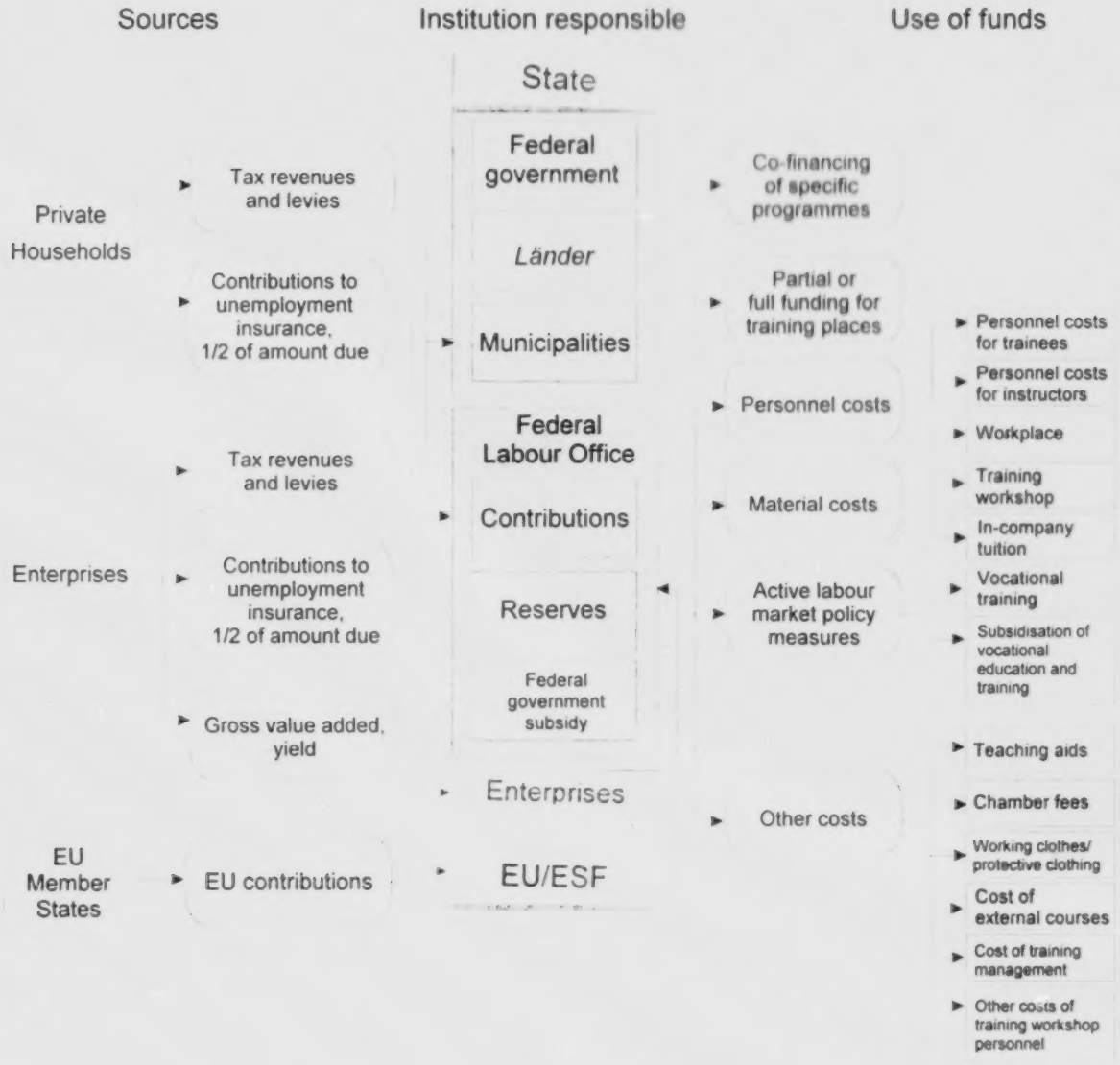
[35] Cf. 1997/98 Basic and Structural Data, p. 47.

[36] Cf. Timmermann 1994, pp. 86 et seq.

Figure 1 Financial flows of training in individual enterprises



Source: Author's presentation

2.2.1.1 Sources of funding

The direct and indirect sources of funding open to training enterprises can theoretically be plausibly identified. However, no reliable data are available in particular for indirect and non-enterprise sources. The primary direct sources of enterprise funding are current sales revenues, interest income, and income from leasing and bonuses. Secondary sources are credits and loans in anticipation of future income and the liquidation of provisions or retained earnings (reserves) from past income. In addition, contributions to unemployment insurance (half of which are paid by employers, both training providers and non-providers, and half by employees) can accrue to enterprises providing training as stipulated by active

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labour-market policies on vocational training and the promotion of vocational education and training.[37] The creation of the European Social Fund (ESF) in 1994 has opened up a further direct source of funding which supplements allowances from the Federal Labour Office in specific sponsored programmes. State income from taxes and fees have also proved to be a direct co-financing source for specific, State-run programmes for the promotion of enterprise-based training places. However, grants from tax revenues are subject to the principle of non-appropriation, which prohibits earmarking them for specific purposes and thus allocating specific income to specific expenditure. As a result, conflicts often arise in the State departments responsible for distributing funds when determining priorities within both the overall budget and the budget of the appropriate department. The indirect sources of funding take the form of tax relief such as tax reductions or mitigation of tax liabilities for company profits, whose impact can be speculated upon by means of theoretical plausibility studies on the basis of hypotheses of incidence, but whose dimensions remain unknown.

2.2.1.2 Use of funds

The statement of enterprise funds reserved for training in 1991 and 1995 would appear to be useful, since no data from representative surveys are available for 1986 and 1996, and the only update available on results from 1991,[38] which follows the same research design, is for 1995.[39] To make comparisons with earlier surveys[40] we must fall back on absorption costing, although referring to partial costing would focus on the additional cost actually generated by training, since the imputed cost of managing training and of part-time instructors would not be included.[41] Table 5 shows projected overall spending by private businesses on enterprise-based training for 1991 and 1995 in the pre-reunification Federal Republic of Germany.

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37 For details see Part 4.

38 Cf. Bardeleben/Beicht/Feher 1995.

39 Cf. Bardeleben/Beicht/Feher 1997.

40 Cf. projection of the 1980 survey by the Federal Institute for Vocational Training for 1985 in Beicht/Holzschuh 1990.

41 Cf. Timmermann 1994, pp. 34 et seq.

Table 5 Enterprise training costs for 1991 and 1995

Sectors	Gross full cost (in thousand million)		Net full cost (in thousand million)	
	1991	1995	1991	1995
Industry, trade, crafts	DM 35.0	DM 35.1	DM 21.0	DM 21.0
	ECU 17.86	ECU 17.91	ECU 10.71	ECU 10.71
Agriculture, liberal professions	DM 5.0	DM 5.7	DM 3.0	DM 3.4
	ECU 2.55	ECU 2.91	ECU 1.53	ECU 1.73
Total cost	DM 40.0	DM 40.8	DM 24.0	DM 24.4
	ECU 20.41	ECU 20.82	ECU 12.24	ECU 12.45
In per cent of nominal GDP	1.51%	1.18%	0.91%	0.71%

Source: Bardeleben/Beicht/Feher 1995, pp. 84-85; Bardeleben/Beicht/Feher 1997, pp. 9 und 20; 1998 Labour and Social Statistics, No 1.13. Author's calculations. Rounded values.

The total cost of training to private businesses in West Germany can only be projected on the basis of the average gross and net full cost.[42] For the industry, trade and crafts sectors, the total gross cost for 1991 was DM 35 000 million (ECU 17 860 million) and the net cost was DM 21 000 million (ECU 10 710 million). In 1995 the estimated gross cost was DM 35 100 million (ECU 17 910 million) and the net cost again DM 21 000 million (ECU 10 710 million). The sectors agriculture and the liberal professions were not included in the 1991 survey. However, if we assume, as did the 1980s study, that the cost of training in agriculture is similar to the cost for trades, and that the cost of training in the liberal professions is similar to total average values for industry, trade and crafts, then for 1991 the average gross total cost was DM 40 000 million (ECU 20 410 million) and the net total cost was DM 21 000 million (ECU 10 710 million). When costs to the above training sectors were calculated in the same way for 1995, the total amount was DM 40 800 million (ECU 20 820 million) for gross cost and DM 24 400 million (ECU 12 450 million) for net cost.[43]

2.2.2 Funding of school-based training

Most school-based workshops are run by the chambers and related autonomous organisations of industry. Training in these workshops is financed by general contributions to the chambers and by special levies, which are based on business profit or anticipated tax revenue. The chamber contributions are used to refinance training workshops and

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[42] It is important to note that the gross costs of training are offset not only by productive opportunity yields but also by the opportunity yields through recruitment. Only this balance permits relatively precise conclusions to be drawn about the real net burden of training costs to enterprises. Cf. comments by Cramer/Müller 1994, pp. 12 et seq. cf. also Timmermann 1994, pp. 46 et seq.

[43] C.f. Bardeleben/Beicht/Feher 1997, p. 20.

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training provision by individual enterprises.[44] The direct payments from special levies are not, however, paid directly to training enterprises, since the cost of school-based training has to be allocated to the implementing agencies on the basis of fixed amounts for limited maximum lengths of training.

The levies are collected from all member enterprises of a chamber, district crafts association or guild but are distributed in different ways. They can be taken from general contributions as own resources of the organisation; they can be refunded to training enterprises according to the number of trainees; training enterprises can be reimbursed by a redistribution of levies; and finally distribution can be in the form of general cost sharing between training and non-training enterprises. Additional sources are subsidies from federal and *Länder* governments, and grants and loans from the Federal Labour Office. Money is raised by means of hybrid financing on the regional principle, whereby the enterprises of a certain region are supposed to guarantee to absorb costs. Neither the number of regulations existing in each of the chamber districts nor the volume of funding raised in this way is known.[45]

2.2.2.1 Sources of funding

Establishing and operating school-based workshops entail costs, and a demand for funding, comparable to those of company training workshops in large enterprises. Direct sources of financing come from companies in the form of direct or indirect taxes and levies, which the State then redirects to the school-based workshops as grants or bonuses. Enterprises also make direct payments to the school-based workshops from sales revenues or pay indirectly through their contribution to the chamber. Where the Federal Labour Office organises training measures in school-based workshops, enterprises also contribute to their funding through employers' contributions to unemployment insurance. Private households contribute indirectly to funding by paying direct and indirect taxes and levies from which the State finances its subsidies to school-based workshops. Working households paying compulsory unemployment insurance (employees pay half towards unemployment insurance) also contribute through the social insurance system of the Federal Labour Office. Further direct sources of funding are the specific ESF promotion programmes, which co-finance certain training programmes also supported by industry and the Federal Labour Office. Indirect sources of funding are tax relief for enterprises in the form of tax reductions or exemptions.

2.2.2.2 Use of funds

Where operating costs are not covered by fees for courses, they are usually paid out of chamber fees from training and non-training enterprises. Small and medium-sized enterprises do not have to bear the expense alone, however, since federal and *Länder*

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[44] Cf. Mattern 1979, pp. 125 et seq.

[45] Cf. comments on fees in the 1997 Report on Vocational Education, p. 99.

governments share to varying degrees in subsidising investment and current operating costs, to encourage training provision and maintain the competitiveness of SMEs.

Thus, in the western *Länder* in 1995 three SME-projects obtained subsidies totalling DM 17.0 million (ECU 8.67 million), and 14 modernisation projects were granted around DM 14.3 million (ECU 7.3 million) to aid investment. However, 170 applications for financial support with an average claim to around DM 250 million (ECU 127.56 million) had to be deferred because public budgets were overextended. They document the urgent need for modernisation. Three projects were granted a total of DM 1.4 million (ECU 0.71 million) in operating subsidies because of time limits on subsidisation of extra-plant workshop current costs. In the eastern *Länder*, 26 projects were granted approximately DM 87.4 million (ECU 44.6 million) in subsidies. Here applications were received from 92 projects with average requests for DM 695 million (ECU 354.6 million). Operating cost subsidies provided 15 school-based workshops with DM 6.4 million (ECU 3.27 million) as start-up financing. However, in view of the strain on the public budget and the slowly improving financial situation of the organisations, subsidisation terms have steadily become more stringent. For the first year of operation and for a further six fiscal years subsidies of DM 6 000 (ECU 3 061.22) have been granted per tradecraft training place, DM 4 800 (ECU 2 448) per commercial training place and DM 3 600 (ECU 1 836.73) per boarding school place. On 1 January 1996 the subsidy was cut by one-third in each of the last two fiscal years. In the fifth fiscal year it is still possible to grant DM 4 000 (ECU 2 040.82) for a tradecraft training place, DM 3 200 (ECU 1 632.65) for a commercial training place and DM 2 400 (ECU 1 224.49) for a boarding place. In the sixth fiscal year financial support is reduced to DM 2 000 (ECU 1 020.41) for a tradecraft training place, DM 1 600 (ECU 816.33) for a commercial training place and DM 1 200 (ECU 612.25) for a boarding place.[46] Table 6 reflects the public subsidy of school-based workshops with funds from the responsible federal ministries (budget estimates) and the Federal Labour Office. No information is available on total expenditure by enterprises or private households for school-based workshops.

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[46] Cf. 1996 Report on Vocational Education, p. 90.

Table 6 Federal funds based on budget estimates for the subsidisation of school-based vocational training workshops for 1986, 1991, 1996 and 1997

Use of funds	1986	1991	1996	1997
Federal Ministry for Education, Science, Research and Technology	DM 119.0 million	DM 113.0 million	DM 135.0 million	DM 120.2 million
Subsidisation of school-based vocational training workshops	ECU 60.71 million	ECU 57.65 million	ECU 68.88 million	ECU 61.33 million
Federal Ministry of Economics	DM 7.5 million	DM 5.0 million	DM 142.8 million	DM 144.9 million
Construction or expansion of initial, further training and retraining facilities	ECU 3.83 million	ECU 2.55 million	ECU 72.86 million	ECU 73.93 million
Federal Ministry for Intra-German Relations	DM 5.5 million	DM 6.9 million	-	-
Construction, expansion, equipping and modernisation of school-based training workshops	ECU 2.81 million	ECU 3.52 million		
			-	-
Federal Labour Office	-	DM 263.7 million	DM 9.6 million	-
School-based vocational training in regions with above average training place deficit		ECU 134.54 million	ECU 4.9 million	
	-			-
Total expenditure	DM 132 million	DM 388.6 million	DM 287.4 million	DM 265.1 million
	ECU 67.35 million	ECU 198.27 million	ECU 146.63 million	ECU 135.26 million
In per cent of nominal GDP	0.007%	0.015%	0.0081%	0.0073%

Source: 1987 Vocational Training Report, p. 192; 1992 Vocational Training Report, p. 244; 1997 Vocational Training Report, p. 234; 1998 Vocational Training Report, p. 249. Own calculation. Rounded values.

The table shows that funding from the Federal Ministry of Education rose by about 19.5% from DM 113.0 million (ECU 57.65 million) in 1991 to DM 135.0 million (ECU 68.88 million) in 1996. Public funds from the Federal Ministry of Economics grew substantially in the same period, from DM 5.0 million (ECU 2.55 million) to DM 142.8 million (ECU 72.86 million), a more than 28-fold increase. This enormous growth in spending is explained primarily by the establishment of new school-based workshops for crafts trades in the new *Länder*, which are subsidised in equal parts by the Ministries of Education and Economics. In contrast, spending by the Federal Labour Office fell during the same period from DM 263.7 million (ECU 134.54 million) to DM 9.6 million (ECU 4.9 million), a 27-fold fall. This omits federal money not specifically allocated but subsumed in other categories, and *Länder* funds outlined in *Länder* programmes for the promotion of vocational education and training but not itemised in any statistics.

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2.2.3 Sector training funding

In the current discussion on the funding of enterprise-based vocational training, the collectively agreed system of levies in the construction industry is often cited as a model for the shift from vocational training financed by individual enterprises to financing of school-based training. However, it is significant that the collective agreement on financing school-based training in the construction industry was reached under special circumstances. Thus, as a rule, school-based training takes six to seven weeks throughout all sectors of business. In the construction industry, however, training regulations contain a binding provision for 31 to 37 weeks of school-based training for all skilled trades. Trainees receive 16 to 20 weeks of school-based training in their first year. Together with attendance at vocational school, in block form, and prescribed holidays, the restructuring of skilled occupations in the construction business meant that in 1973 trainees were absent from their enterprises for almost the entire first year of their training. Under these circumstances, hardly any firm would have been willing to take on trainees and the cost involved, especially the relatively high trainee remuneration. Thus the financing system in the construction industry serves primarily to make the extremely long absences of trainees from their enterprises bearable.[47]

2.2.3.1 Sources of funding

The sources of financing for sector training funds can be described as follows, although there are few reliable data available on indirect and non-enterprise sources. Direct sources of funding are company income from sales revenues, interest income, income from leasing, bonuses and tax rebates, and credits and loans. A specific sum is levied from this income, a certain percentage of total gross wages and salaries, as a contribution to the sector-training fund. Additionally there are direct grants from federal and *Länder* funds, and sometimes from the Federal Labour Office and the ESF, to enterprises offering suitable courses. Indirect sources of funding are tax relief in the form of tax reductions or waivers where enterprises show a profit, but no reliable empirical conclusions can be drawn on their exact amount at present.

2.2.3.2 Use of funds

In contrast to the broad discussion on financing of enterprise-based training, both empirical data and descriptive analyses of the specific regulations for financing for sector training funds are comparatively rudimentary, although the system has been in existence for 30 years.

Revenue from sector funds is used mainly to reimburse enterprises for expenditure on enterprise-based and school-based training. Costs are shared by all enterprises, since enterprises that do not provide training themselves also have to contribute to funding

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[47] Cf. Kath 1994, pp. 12 et seq.

enterprise-based and school-based instruction. Table 7 summarises the sparse empirical findings on revenue from sectors with training funds.

Table 7 Revenues of sectors with training funds for 1984, 1986 and 1994

Sectors	1984	1986	1994
Construction industry	DM 580 million	DM 460.9 million	DM 1 200 million
	ECU 295.92 million	ECU 235.15 million	ECU >612.24 million
Horticulture and landscaping	DM 6.5 million	DM 6.7 million	DM 18 million
	ECU 3.32 million	ECU 3.42 million	ECU 9.18 million
Stonemasons and stoneworkers	DM 3.6 million	DM 3.7 million	DM 6.4 million
	ECU 1.84 million	ECU 1.89 million	ECU 3.27 million
Roofing trade	DM 11.0 million	DM 12.1 million	DM 15 million
	ECU 5.61 million	ECU 6.17 million	ECU 7.65 million
Scaffolding trade	-	-	DM 18 million
	-	-	ECU 9.18 million
Total revenue	DM 601.1 million	DM 483.4 million	DM 1 257.4 million
	ECU 306.68 million	ECU 246.63 million	ECU 641.53 million
in per cent of nominal GDP	0.034%	0.025%	0.038%

Source: 1985 Report on Vocational Education, p. 105; 1987 Report on Vocational Education, p.151; Kath 1996, pp. 289 and 290. Author's calculations. Rounded values.

It is important to note that different years cannot be reliably compared. One reason is a problem with statistical compatibility due to the reunification of Germany in 1990. In addition, the reference variable is termed a grant in 1984, a total in 1986 and a source of funds in 1994, all of which can, but do not necessarily, describe the same thing. Apart from this, 1994 data are the latest available.

The use of collectively agreed levies in the construction industry is presented in the following. The oldest and biggest sector training fund originated in a collective labour agreement which came into force on 1 May 1976 and was amended in 1979, between the Central Association of the German Building Trade, the Main Association of the German Construction Industry and the Construction Workers' Trade Union. At present, every employer covered by the collective agreement has to pay a total of 2.8% of the gross wages and salaries of all blue-collar workers into the holiday and wage equalisation fund. Training enterprises are reimbursed the collectively agreed training remuneration for ten months in the first year of training, six in the second and one month in the third for trainees learning a trade in the construction sector. The remuneration for technical and commercial trainees is refunded to the training enterprises for twelve months of the first

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and four months of the second year of training. In addition, the training fund reimburses 16% of the social security contributions advanced by the employer. School-based instruction is compensated in the collective agreement as follows: a day's training at the rate of DM 48 (ECU 24.49) or up to DM 70 (ECU 35.71) where higher costs are documented, and a night at a boarding school at the rate of DM 36 (ECU 18.37) or up to DM 50 (ECU 25.51). Trainees can also claim for transportation cost, to the training site. Since 1 February 1991, enterprises in the new *Länder* have been included in the construction industry's sector training fund system.[48]

2.2.4 Cooperative funding

Institutionalising a training cooperative often causes many organisational, curricular, legal and financial problems. However, the variety of training cooperatives already in existence indicates that enterprises can successfully cooperate in many ways.[49]

In the model 'central enterprise with partner enterprises', several enterprises form a cooperative with a central enterprise, or senior partner, and partner enterprises. The central enterprise acts as instructor, and concludes training contracts in its own name, but organises phases of training with the partner enterprises and sends trainees to partner enterprises for certain stages of training. It is ultimately responsible for overall training, and partner enterprises perform only supplementary training tasks. In another model, several smaller or medium-sized training enterprises may form a joint 'training consortium'. Each enterprise is an equal partner in the contract. The individual enterprises offer training independently and conclude contracts with their trainees, but send them on exchange to other members of the consortium for certain phases of training. 'Commission training' is a cooperative form in which a few small and medium-sized enterprises enter into an agreement with a large, usually local, enterprise. Each enterprise offers training and concludes training contracts with its own trainees, but the small and medium-sized enterprises send their trainees to a neighbouring large enterprise with a training workshop for certain training periods and units. In a 'training association' individual enterprises set up a joint association which is legally independent. The association, as training provider, concludes the contracts with trainees and the board or appointed secretary of the association sends trainees to the member enterprises for certain stages of training.

2.2.4.1 Sources of funding

The direct sources of finance for training cooperatives, like the other forms of training financed by enterprises, are company income of the various types listed above. Supplementary funding comes from federal or *Länder* grants for the promotion of training cooperatives and subsidies from Federal Labour Office and ESF funds, where the cooperatives offer appropriate programmes. The indirect sources of funding, which are

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[48] Cf. Kath 1996, pp. 288 et seq. cf. also Adams 1997, pp. 14 et seq.

[49] Cf. Schlottau/Schmidtmann-Ehnert/Selka 1996, pp. 6 et seq. cf. for details Schwiedrzik/Meyer/Eule 1987.

difficult to assess empirically, are again tax relief for the enterprises in the form of tax reductions or mitigated tax liability.

2.2.4.2 Use of funds

Although enterprises involved in initial vocational training are becoming more interested in cooperatives as solutions, at present no empirical information beyond a general qualitative identification of the uses of funds by enterprises in training cooperatives appears to be available. In the model 'central enterprise with partner enterprises', the central enterprise usually pays the largest item – trainee remuneration – while the partner enterprises cover the cost of instructors and the cost of plant and materials for their part of the training. In some cases the central enterprise bears the whole burden of training within the cooperative, in view of its overall responsibility. In the training consortia, company expenditure on training is generally balanced by reciprocal services. In the commissioned training model, each of the partners to the contract can, in principle, provide training against reimbursement of costs. As a rule, however, the small and medium-sized enterprises finance training delegated to a large enterprise with a training workshop. In the training association the cost of management, trainee remuneration, examination fees and training aids are usually covered by membership fees, federal and *Länder* subsidies and donations.

There are strong indications that the cooperative will soon increasingly assume an inter-company training function divided among the member enterprises. Thus funding through the cooperative could take the place of the apparently more expensive funding of inter-company workshops. If it is possible to balance costs and returns in cooperative funding, it seems probable that training capacities spread across the entire cooperative will not increase costs. Smaller and medium-sized enterprises which have no training workshops could profit from the value-adding work of the trainees assigned to them, if, for example, they offer production or service projects to the enterprises constituting the cooperative.[50]

2.2.5 Summary

The legal basis of enterprise-based training does not stipulate modalities of funding. Therefore it is no surprise that the ways of financing enterprise-based training have become increasingly diversified in recent years. Thus the still dominant financing by individual enterprises is increasingly being supplemented by forms of inter-company, sector training fund and cooperative financing as well as many various direct and indirect transfers of public funds.

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[50] Cf. Heidegger/Rauner 1997, p. 39.

2.3 Vocational school funding

With a few, numerically insignificant exceptions, vocational schools are State schools run by local governments. Schools can be the responsibility of individual municipalities, municipal associations (e.g. districts) or school promotional associations established by several communities. In this case, the State is responsible not only for funding, but also for provision of part-time vocational school education. However, the historically rooted distinction between internal and external school affairs in the German public school[51] system leads to a division of funding responsibilities among different levels of government. Internal school affairs are the responsibility of the *Länder* and include supervision, curriculum planning, determination of school structures, teacher training and – the largest outlay – teachers' salaries. The *Länder* also subsidise the costs of school buildings by the municipalities. External school affairs, such as some construction work, maintenance and renovation of school buildings, acquisition of teaching and learning materials, and provision of administrative and non-teaching staff, are the responsibility of the municipalities.[52] The principle of non-allocation of public funds to specific purposes is particularly important. According to this legal principle, all income should be used to cover all expenditure. This means that in Germany no funds are allocated *a priori* for State education provision, but that the volume of funding is reassessed each year. Education has to compete annually with the needs of other operating divisions in the political and administrative process of budget allocation. Only a small proportion of funds for public vocational schools comes from tuition fees. Most is drawn from the general tax revenues of *Länder* and municipalities. The federal government is involved in the funding of vocational schools only through maintenance grants for pupils, including vocational school pupils, as part of family income support. Funding of vocational schools can be described as advance funding, since *Länder* and municipalities refinance their expenditure from tax revenue from private households and enterprises. Figure 2 shows the hybrid funding of part-time vocational schools.

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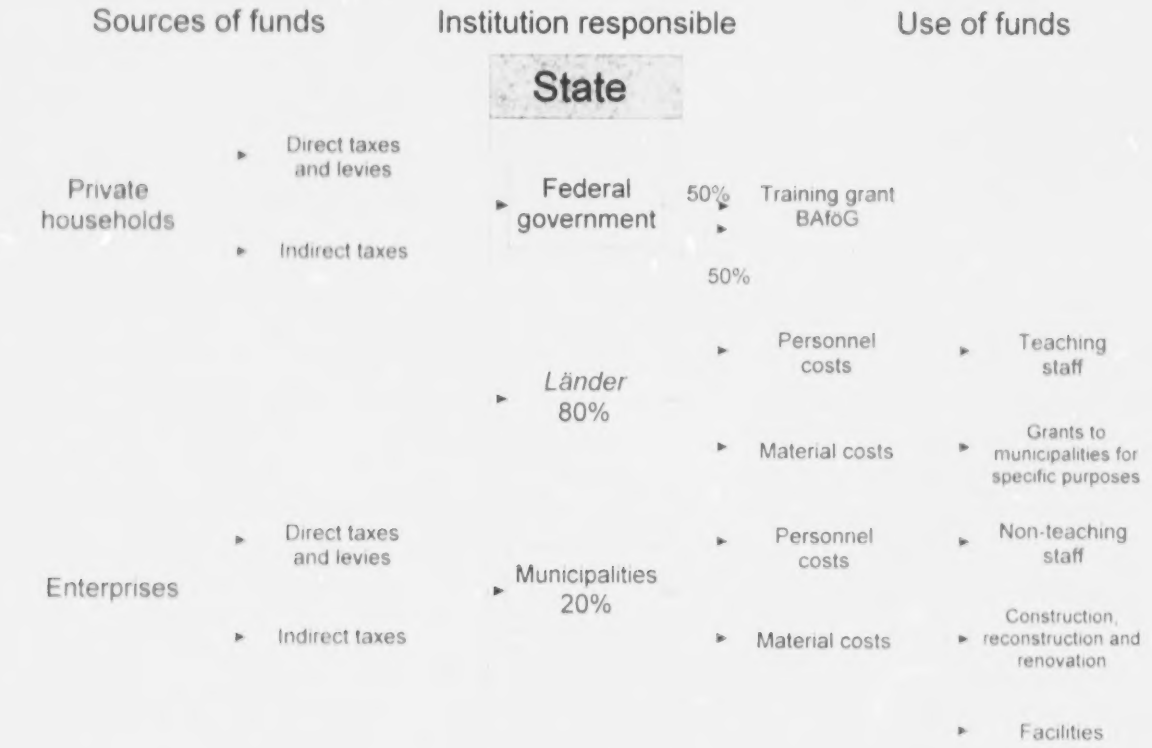
[51] Throughout this report, 'public school' refers to any school under public authority (such as municipalities, counties, or the state).

[52] Cf. Mattern 1979, p. 22.

Figure 2 Financial flows of part-time vocational schools



Source Author's presentation

The private part-time vocational school system also receives many forms of institutional and individual financial support from public funds.[53] Regular financial support in the form of subsidies for current personnel and material costs is paid to eligible private vocational schools. Grants are awarded either as a fixed sum based on certain statistical criteria and differing according to the type of school, or the school receives a subsidy corresponding to a certain percentage of proven need. There are other forms of financial support, some of which are balanced against the regular financial support, e.g. subsidies for building costs, grants within the framework of the freedom of choice of teaching aids, contributions to teachers' pensions, paid sabbatical leave for teaching staff with public servant status and reimbursement of tuition fees and transport costs. Funds are provided primarily by the *Länder*, with a small contribution from municipalities. The size of the relevant subsidies depends on spending levels in the public school system. The percentage of public funding in the overall funding of private vocational schools varies by *Land*, type of school and status.[54] No aggregate data are available on the volume of private vocational school funding. All that can be said is that private vocational schools receive up to 80% of their authorised expenses when they supplement public schools, and 90% when they replace

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[53] Cf. Secretariat of the Standing Conference of *Länder* Ministers of Education and Cultural Affairs 1997, pp. 96 et seq. cf. also Kell 1995, p. 392.

[54] Numerous special regulations apply to licensed private schools as opposed to approved private schools.

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public schools. The remaining 20% and 10%, respectively, have to be collected from the private institutions to which they belong (e.g. churches, large enterprises) and pupils' parents (tuition fees).

2.3.1 Sources of funding

The main direct sources of funding of the *Länder* and municipalities are taxes and levies from individuals and enterprises – after completion of fiscal equalisation[55] – either during the relevant period or on credit and loan as an advance on future income. Recently public assets have been liquidated with increasing frequency, although this is still of only marginal significance. Indirect sources of funding can be named, but not quantified inasmuch as attending full-time vocational training courses also leads to intangible losses of revenue from taxes and fees in terms of loss of pupils' income.

2.3.2 Use of funds

While the *Länder* cover the bulk of personnel costs, the municipalities fund the greatest part of current material costs and material investments from their own revenues. At present the *Länder* finance nearly 80% of expenditure by vocational schools. However, this includes training grants for pupils in full-time vocational schools. The municipalities bear the remaining 20% of total spending. Pupils' families contribute an unknown amount by paying for schoolbooks, other learning aids and transportation to school.[56] Table 8 breaks down public expenditure on all vocational schools for selected years by government unit.

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[55] Cf. Musgrave/Musgrave/Kullmer 1992, pp. 49 et seq.

[56] Cf. Arnold/Marz 1979, p. 52.

Table 8 Public spending on vocational schools by unit of government for 1986, 1991, 1995 and 1996

Unit of Government	1986 a c	1991 a c	1995 b c	1996 b d
Länder	DM 5618 million	DM 6 543 million	DM 8 635.36 million	DM 8 834.89 million
	ECU 2 866.33 million	ECU 3 338.27 million	ECU 4 405.8 million	ECU 4 507.6 million
Municipalities	DM 1 453 million	DM 1 748 million	DM 1 534.19 million	DM 1 473.43 million
	ECU 741.33 million	ECU 891.87 million	ECU 782.75 million	ECU 751.75 million
Promotional associations	DM 7 million	DM 7 million	DM 1.0 million	DM 1.0 million
	ECU 3.57 million	ECU 3.57 million	ECU 0.51 million	ECU 0.51 million
Total basic funds	DM 6954 million	DM 8294 million	DM 10170.55 million	DM 10309.32 million
	ECU 3547.96 million	ECU 4231.63 million	ECU 5189.06 million	ECU 5259.9 million
in per cent of nominal GDP	0.36%	0.31%	0.29%	0.29%

Source: Fiscal results of the public budget for education, science and culture 1986, p. 63; Fiscal results of the public budget for education, science and culture 1991, p. 64; Federal and *Länder* Committee for Educational Planning and Research Promotion 1997, Tables 12 and 19. Author's calculations. Inconsistencies from rounding values.

Legend: The values for vocational schools include values for schools of the commercial, health and social sectors. a: old [West German] *Länder*; b: all of Germany; c: actual values, d: projected values according to the Federal and *Länder* Committee for Educational Planning and Research Promotion, 1997.

The table shows that *Länder* spending dominates public financing of vocational schools. The growth in *Länder* expenditure is due primarily to rises in wages and salaries, since the *Länder* cover most of the teaching staff payroll. The sources consulted in compiling Table 8 give no separate information on public expenditure for part-time vocational schools. This amount is included in the expenditure on vocational schools. Thus no overall spending and funding statistics are available for the dual system.[57]

2.3.3 Summary

Funding for vocational schools – and in particular the public vocational schools – comes primarily from the public budget. The traditional division of tasks between *Länder* and municipalities has led to a division of funding for internal and external school affairs. Laws on horizontal fiscal equalisation between the *Länder* and vertical fiscal equalisation between *Land* and municipalities ensure that the tax base of government units is taken into account. Attendance at public part-time vocational schools is free, but other types of vocational school, particularly private schools, charge for certain vocational courses.

[57] Cf. also comments in Hoffmann 1994, pp. 167 et seq.

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2.4 Conclusions

Initial vocational training funding in Germany can be summarised as follows:

- the analysis of funding structures for initial vocational training revealed a multitude of actual modes of funding, as well as a number of financial sources for investors and providers;

- it became clear that enterprise-based initial training is financed increasingly not by the individual enterprise alone, but also by inter-company training funds, sector-training funds and cooperative financing. The importance of the last-named source will probably grow;

- it was confirmed that although enterprises have traditionally played an important role in funding vocational training, the State is involved to a considerable extent in the funding of initial vocational training, by providing vocational schools and subsidising enterprise-based vocational training and granting tax reductions or mitigation of tax liabilities;

- all modes of financing initial vocational training are a form of advance financing, since all those who finance initial vocational training attempt to pass expenses on to third parties;

- vocational training relies on hybrid funding, since all spheres of the economy help finance initial training. Involvement is measured on different scales and cannot be reliably quantified empirically. Initial vocational training is financed mutually because of the non-appropriation principle of the German tax system. Proportional advanced financing and specific refinancing options add to the complexity.

Table 9 below summarises overall expenditure on initial vocational training.

Table 9 Total expenditure on initial vocational training

Economic unit	1986 a		1991 a		1996 b	
	absolute values	in %	absolute values	in %	absolute values	in %
Public sector	-	-	-	-	-	-
European Union	-		-		-	
Federal government	DM 132 million	0.3%	DM 388.6 million	0.72%	DM 287.4 million	0.59%
	ECU 67.35 million		ECU 198.27 million		ECU 146.63 million	
Länder	DM 5 618 million	12.84%	DM 6 543 million	13.18%	DM 8 834.89 million	18.11%
	ECU 2 866.33 million		ECU 3 338.27 million		ECU 4 507.6 million	
Municipalities and promotional associations	DM 1 460 million	3.34%	DM 1 755 million	3.53%	DM 1 474.43 million	3.02%
	ECU 744.9 million		ECU 895.41 million		ECU 752.26 million	
Total	DM 7 210 million	16.48%	DM 8 686.6 million	17.5%	DM 10 596.72 million	21.72%
	ECU 3 678.57 million		ECU 4 431.94 million		ECU 5 406.49 million	
Private sector	DM 36 531.4 million	83.52%	DM 40 967.18 million	82.5%	DM 38 180.49 million	78.28%
Enterprises	ECU 18 638.47 million		ECU 20 901.62 million		ECU 19 479.84 million	
Individuals	-	-	-	-	-	-
	-		-		-	
Total	DM 36 531.4 million	83.52%	DM 40 967.18 million	82.5%	DM 38 180.49 million	78.28%
	ECU 18 638.47 million		ECU 20 901.62 million		ECU 19 479.84 million	
Federal Labour Office	-	-	-	-	-	-
	-		-			
Total expenditure	DM 43 741.4 million	100%	DM 49 653.78 million	100%	DM 48 777.21 million	100%
	ECU 22 317.04 million		ECU 25 333.56 million		ECU 24 886.33 million	
In per cent of nominal GDP	2.27%		1.88%		1.38%	

Source: Author's calculations. Inconsistencies from rounding values.

Legend: Cf. Beicht/Holzschuh 1990, p. 37; cf. Bardeleben/Beicht/Feher 1997, pp. 18 and 20; cf. 1998 Labour and Social Statistics, Tab. 6.13. a: old [West German] *Länder*; b: all of Germany. The total cost of training to enterprises includes funding through sector training funds and expenditure by individual enterprises. Funds from sector training funds are linearly interpolated for the years 1991 and 1996. The values for the cost of training to individual enterprises are extrapolated producer prices for industrial products. They are based on the 1985 projection of the 1980 survey by the Federal Institute for Vocational Training for 1986 and on the 1991 survey of the Federal Institute for Vocational Education and Training for 1996.

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The future of the dual system will probably remain a controversial topic. The search for alternative modes of enterprise funding, promising more and better training places, especially in the new *Länder*, will continue. The already rapid creation of new skilled occupations and modernisation of existing ones will also continue. Coordination between part-time vocational schools and training enterprises will be improved by new concessions to flexibility by the part-time vocational schools, leading to a more favourable cost/benefit ratio for enterprises. The global allocation of budgetary funds to individual schools will increase. Budgets will not be confined to current supplies. Within the next ten years they will also include staff costs and investment funds. Individual vocational training schools will assume much greater responsibility for their own administration and resource management.

Part 3 Continuing vocational training

3.1 Specific background

Continuing vocational training in Germany is characterised by: a) division of responsibilities between federal and *Länder* governments, b) pluralism of providers, c) market allocation, d) subordinate role of the State, e) diversity of formal courses and f) selection based on diverse training and work experience pre-requisites.[58] The institutional structure of continuing vocational training involves a multitude of providers, agencies and associations, usually representing specific social and business interests. They establish the socio-political environment for continuing training institutions, which are responsible not only for content, form, duration and skills level of courses, but also for personnel and course organisation. The institutions are subsidised, usually in the form of grants for the institution as a whole, or for specific courses.

Given the lack of statistics on vocational training, it is not surprising that only modest data are available on financial flows and costs of continuing vocational training in Germany. The plurality of agencies, institutions and courses on the supply side and the heterogeneous clientele on the demand side lead not only to variety but also to a lack of transparency in the continuing training market.[59] Table 10 profiles continuing vocational training providers in Germany in 1991 and 1994.

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[58] Cf. Bergner/Ehrmann/Grünewald/Sauter 1991, pp. 9 et seq.

[59] Cf. Sadowski/Decker 1993, pp. 35 et seq.

Table 10 Provision of continuing vocational training in percentages for cases of participation and volume of training in 1991 and 1994

	Values in %			
	Cases of participation		Volume of continuing training	
Provider a	1991	1994	1991	1994
Employers/enterprises	44	53	32	35
Private colleges	12	10	13	19
Chambers	4 b	6	7 b	9
Academies, scientific societies	5 b	5	5 b	4
Occupational associations	7	5	4	4
Adult education centres b	3	3	2	4
(Specialised) institutes of higher education b	5	2	8	4
Occupational insurance mutuals	-	2 b	-	3 b
Specialised schools	2 b	2 c	8 b	4 c
Employers' associations	2 b	1 c	3 b	1 c
Trade Unions	3 b	1 c	4 b	1 c
Other organisations d	4	3	4	3
Other unstipulated organisations	6	7	7	9
Unspecified	1	0	2	0
Total	99	100	99	100

Source: 1996 Reporting System, p. 253.

Legend: a: listed according to share of cases of participation 1994; b: basis: 40-99 cases of participation per provider; c: less than 40 cases of participation per provider. Cases of participation = Number of participants x number of events. Volume of continuing training = cases of participation x duration of events; d: associations (not including occupational associations), non-church welfare associations, parties, open education institutes, Urania, Chamber of Technology.

The table can be summarised as follows: a) in 1994 more than half the cases of participation involved events organised by employers/enterprises, and the number is growing; b) private institutes are second (10%) and chambers third (6%) in the rankings of cases of participation; c) on the basis of volume, employers/enterprises are still the most important providers of continuing training, although they accommodate 'only' about a third of participants; d) the reverse is true for private institutes - their contribution to the volume of continuing training is almost twice as high as their share of cases of participation; e) overall, a broad range of continuing training activity is offered and demanded.

Enterprises are the largest investors in continuing vocational training. Their contribution to funding correlates closely to their contribution to the volume of continuing vocational

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training. In-company continuing training differs significantly from continuing training delivered outside the enterprise with regard to target group, duration and skills levels. The target group of in-company continuing training comprises mainly male employees above the level of skilled worker. The training usually lasts less than a week and seldom ends with a generally recognised and applicable certificate.[60] Since the individual enterprise is responsible for the measure, the enterprise itself decides on the amount of continuing training employees receive, its timing and standard – within the legal framework. It also determines what training can cost. In-company continuing training, like initial training, involves advance funding, i.e. the same burden transfer options exist for both.[61]

Next to company self-interest in improving the skills of certain segments of the workforce, the Labour Promotion Act is the most important instrument for specific public funding and promotion of employee continuing vocational training.[62] The Labour Promotion Act implemented various innovations with a considerable impact on specific incentives and thus on the target groups. In the latest amendment to the Law, in March 1997 the *Bundesrat* [upper house of the German parliament] passed the Promotion of Labour Reform Act, which took effect on 1 January 1998 as part of the Social Security Code, Volume III. Continuing vocational training had previously comprised occupational further training, occupational retraining and orientation training. The Promotion of Labour Reform Act merged the concepts 'further training' and 'retraining' under 'continuing vocational training'. Subsidisation of orientation training is continued as an integration grant. Participants in the further training and occupational retraining schemes, which are now being phased out, are registered under the term 'participants in continuing vocational training'. Comparisons with previous years refer to participants in further training and occupational retraining, i.e. not to orientation training. Terminology changes do not affect a) special training schemes for the occupational integration of the disabled, b) promotion of vocational education for the disadvantaged, c) German-language courses, and d) specific training measures.[63]

For a long time, there was only conjecture but no reliable information about the individual cost of continuing vocational training to private persons. The Federal Institute for Vocational Education and Training conducted a representative survey of individual costs and benefits of continuing vocational training for the first time for 1992. It used a broad definition of the term continuing training, and included less-formal continuing training activities along with more-strictly formal ones such as courses. Figure 3 depicts the most important cash flows in continuing vocational training.

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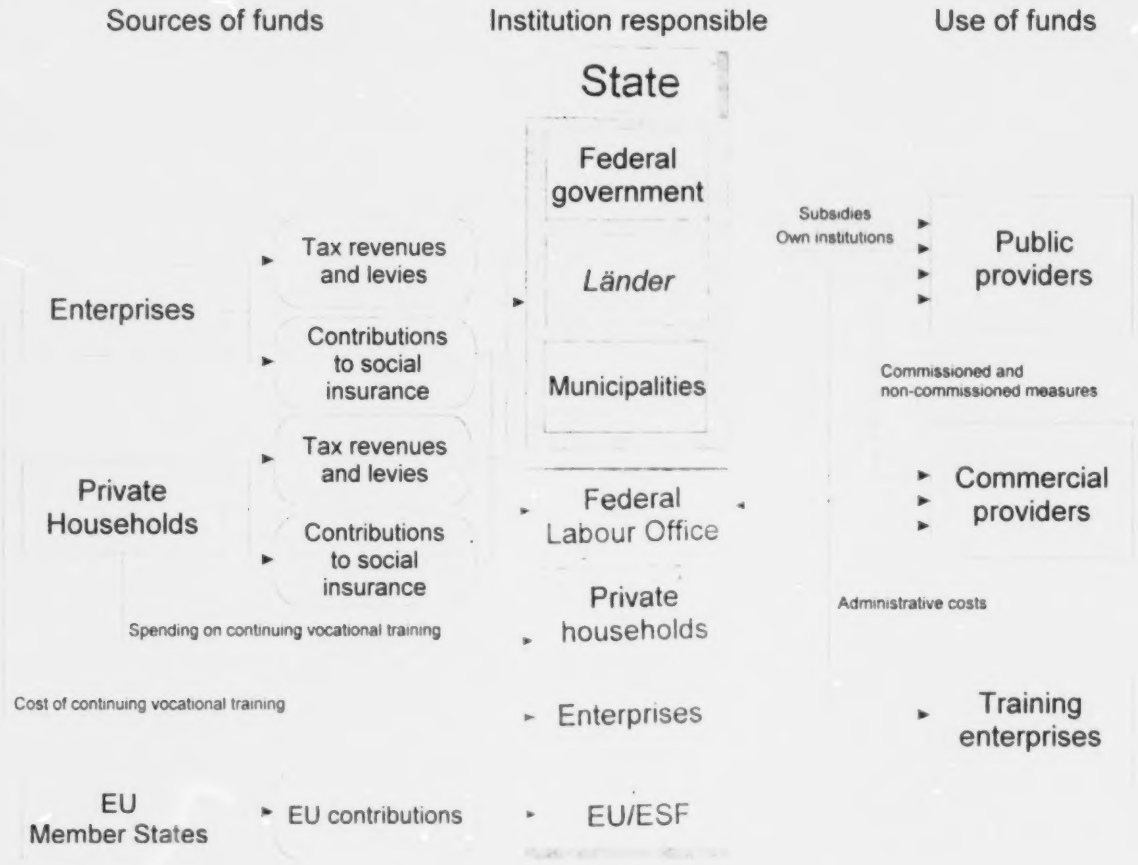
60 Cf. Berger/Ehrmann/Grünewald/Sauter 1991, pp. 21f.

61 Cf. section 2.2.1.

62 For details see section 4.

63 Cf. 1997 Report on Vocational Education, pp. 174 et seq.

Figure 3 Financial flows of continuing vocational education and training



Source: Author's presentation

3.2 Funding of private-sector, in-company continuing vocational training

Whereas modification of enterprise-based initial training funding has long been the subject of an elaborate and polarised political debate, no similar discussion on in-company continuing training is observed. One cannot automatically apply comments on the specific strengths and weaknesses of enterprise-based initial training financing to in-company continuing training. However, certain weaknesses of company financing mechanisms for initial training activities, such as vulnerability to cyclical influences, cost sensitivity and inconsistent quality, can also be applied to occupational or in-company continuing training. Although increasing expenditure has not triggered a discussion about alternative forms of funding for in-company continuing training, there is a greater interest in reliable cost surveys, since increasing costs to investors a) must be justified by efficient resource allocation, b) are increasingly becoming a tactical instrument in the politics of vocational

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training funding, and finally c) are gaining importance in the international comparison of vocational training funding.[64] The increased demand for reliable data is in striking contrast to the considerable methodological problems of cost determination.[65] There are several essential reasons for these problems. The term continuing training is not clearly definable and can thus be applied in either a broad or a narrow sense. The imprecise definition causes enterprises considerable difficulties in determining cost. The inaccuracy of the term continuing training gives rise to a fuzzy definition of cost. Relatively few enterprises have a well-developed cost accounting system for in-company continuing training and the determination and classification of returns requires sophisticated methods.[66]

3.2.1 Sources of funding

While it is possible to identify the direct and indirect sources of funding private enterprises use to finance in-company continuing training on the basis of estimates, no aggregate empirical data are available for indirect and external sources. Enterprises can only finance continuing training from sales revenues, interest income, income from leasing and direct State subsidies in the current period, from credits and loans in anticipation of future income and from transfer of retained earnings from previous periods. In addition, the ESF supplements Federal Labour Office funding to enterprises providing appropriate measures. Tax relief in the form of tax reductions or mitigation of tax liabilities for enterprises showing a profit may subsidise in-company continuing training indirectly.

3.2.2 Use of funds

The use of funds for formal continuing training in private enterprises is presented in Table 11.

Table 11 In-company continuing training costs for 1987, 1992, 1993 and 1995

Year of survey	1987	1992	1993	1995
DM (000 million)	26.7	36.5	24.7	33.9
ECU (000 million)	13.22	18.62	12.6	17.3
in per cent of nominal GDP	1.34%	1.19%	0.78%	0.98%

Source: Weiß 1990, p. 176; Grünewald/Moraal 1995, p. 12; Weiß 1996b, p. 151; Weiß 1997, p. 17. Author's calculation. Rounded values.

[64] Cf. Bardeleben/Sauter 1995, pp. 32 et seq.

[65] Cf. Sadowski/Decker 1993, p. 35.

[66] Cf. 1996 Reporting System, pp. 307 et seq.

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The results of the 1993 European survey on continuing training (FORCE)[67] are not directly comparable with the 1992[68] and 1995[69] surveys by the Institute of the German Economy[70]. Both contents and methods vary. The surveys differ on the definition of terms, questioning technique, population (enterprise concept versus concern concept), type of random sampling, random sample composition, size of random sample, projection procedure, and the basis for calculating volume (participants versus cases of participation).[71] It thus seems more appropriate to compare the two surveys by the Institute of the German Economy. The cost of continuing training to enterprises appears to be falling slightly. The total cost of continuing training dropped from 1992 to 1995 by DM 2 600 million (ECU 1 330 million) although the 1995 survey included agricultural and forestry enterprises for the first time. The decline of total continuing training costs reflects both the reductions in costs per employee and the lower number of employees.[72]

Several reasons for the overall fall in continuing training cost are probable. Continuing training measures were shortened and more were conducted outside working hours, reducing the largest item, wage payments to absent staff. Continuing training measures were increasingly relocated from classrooms to the workplace, saving on travel expenses and trainer fees. Continuing vocational training was investigated to detect redundant resources, leading to a fall in the cost of full-time and part-time continuing training personnel.[73]

It should be noted that the total cost of in-company continuing training is a projection from surveys, requiring estimates. Their statistical reliability has frequently been questioned. The total cost given is gross full cost, from which any returns through participation in continuing training should be deducted.[74] Further, the costs of in-company continuing training are largely indirect costs resulting from loss of work by participants. This makes the cost of lost working hours a deciding factor in determining the cost of continuing training, and influences the effectiveness of the cost argument.[75]

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67 Cf. Grünewald/Moraal 1995.

68 Cf. Weiß 1994.

69 Cf. Weiß 1998.

70 The 1992 and 1995 surveys of the Institute of the German Economy were both based on essentially the same questionnaire, permitting comparison. Cf. Weiß 1997, p. 5.

71 Cf. 1996 Reporting System, pp. 309 et seq.

72 Cf. Weiß 1997, p. 18.

73 Cf. ibid., pp. 15 et seq.

74 While productive continuing training returns are less in evidence, the existence of returns from recruitment appears to be incontrovertible, in that in-company continuing training can always be regarded as an alternative to recruiting staff from the external labour market. Cf. also Timmermann 1994, p. 55.

75 Cf. Bardeleben/Sauter 1995, p. 34; cf. also Kath 1996, p. 271.

3.2.3 Summary

Businesses are both the largest provider of continuing training and its most important investor. Enterprises finance continuing vocational training primarily from their own resources. Since enterprises bear the cost of continuing training, and can decide autonomously on the amount of training they will provide, provision is geared to company requirements for guaranteeing performance and competitiveness.

3.3 Funding of legally and publicly supported continuing vocational training

Only a fraction of public funding of continuing training comes from tuition fees. Most of it comes directly from national tax revenues. Public funding of continuing training can thus be called advance financing, since the State refinances its expenditure from personal and corporate tax revenues and levies. Public funding of continuing training can be described as hybrid funding because of the non-appropriation of funds principle – the basic budgetary principle of the German tax system. Private households, companies and the ESF help to fund continuing training. Since no funds are allocated *a priori* for State education provision, the volume of funding is reassessed each year. Continuing training has to compete annually with the needs of other operating divisions in the overall budget and education budget. The cameralistic system of management of State finances, in contrast to company cost accounting, is an account of expenditure and does not permit direct comparison of expenditure by different departments.[76]

A distinction can be made between public continuing training funding and subsidies for individuals and for institutions, depending on the relevant federal and *Länder* legislation. Financial support for individuals includes State loans and credits, as well as tax and fee reductions for eligible individuals. Institutional support measures vary in the *Länder*, but they follow one of two funding objectives. The guarantee objective ensures broad-based, extensive training provision. Assessment is based on the population of the institution's catchment area. The general subsidisation objective restricts public subsidies to institutional training deemed worthy of support. In this case, assessment depends on a) the institution's own contribution, b) the scale of the total contribution of all the institutions included in the system of funding, and c) the amount of money provided in the *Länder* budgets.[77]

Currently, these funding objectives are implemented by two alternative modes of financing continuing training. In the one, the total subsidy is calculated on the basis of verifiable indicators at the beginning of a planning period, independently of the economic and political situation, only according to the total subsidy requirements of the continuing training provider. It is linked to a legal claim to State financial support. In the other, the

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[76] Cf. Mattern 1979, pp. 6 et seq.

[77] Cf. Rohlmann 1997, pp. 25 et seq.

total subsidy is established retrospectively on the basis of the total number of hours of continuing training provided and confirmed in the calendar year two years prior to the current budgetary year. It does not carry a legal entitlement to subsidisation.

The following areas of publicly subsidised continuing training can be distinguished: 1) *Länder* funding of recognised institutions of continuing training, on the basis of specific continuing training and adult education laws, 2) local government funding of local adult education centres (*Volkshochschulen*), 3a) financial support for individuals to acquire school-leaving qualifications under the Federal Law on Education and Training Promotion, 3b) career development training under the Advanced Training Law, 3c) continuing training for employees of federal, *Länder* and local governments.[78]

3.3.1 Sources of funding

Direct sources of funding are public tax revenues, and the unemployment insurance contributions of employers and employees, who are obliged to pay equal shares under the statutory social security system. Another item is federal government subsidies to the Federal Labour Office, when its own resources are insufficient to carry out its assigned tasks. A further source is the ESF, which will complement the tasks of the Federal Labour Office from 1994 probably until 1999. Indirectly tax reductions for participants are another form of public contribution to funding.

3.3.2 Use of funds

No aggregate data are available for the continuing vocational training measures implemented, financed and managed by the public sector. The particular objective of Federal Labour Office funding is to improve chances of employment for the unemployed, to avoid unemployment and to improve enforcement of labour promotion legislation.[79] Table 12 shows public expenditure on continuing training by unit of government.

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[78] Cf. Secretariat of the Standing Conference of *Länder* Ministers of Education and Cultural Affairs 1997, p. 217.

[79] Cf. section 4.

Table 12 Public spending on continuing training according to unit of government for 1986, 1991, 1995 and 1996

Unit of Government	1986 a c	1991 a c	1995 b d	1996 b d
Federal government	DM 737 million	DM 759 million	DM 941 million	DM 1030 million
	ECU 376.02 million	ECU 387.24 million	ECU 480.1 million	ECU 525.51 million
Länder	DM 1 271 million	DM 1 391 million	DM 1 748 million	DM 1 810 million
	ECU 648.47 million	ECU 709.69 million	ECU 890.84 million	ECU 923.47 million
Municipalities and promotional associations	DM 1 129 million	DM 1 504 million	DM 1 983 million	DM 1 910 million
	ECU 576.02 million	ECU 767.35 million	ECU 1011.73 million	ECU 947.49 million
Overall spending, total	DM 3 137 million	DM 3 654 million	DM 4 672 million	DM 4 750 million
	ECU 1 600.51 million	ECU 1 864.26 million	ECU 2 383.67 million	ECU 2 423.47 million
in per cent of nominal GDP	0.16%	0.14%	0.14%	0.13%

Source: 1992/93 Basic and Structural Data, p. 300; 1997/98 Basic and Structural Data, p.290. Author's calculations. Rounded values.

Legend: a: old [West German] *Länder*; b: all of Germany; c: actual values of net expenditure, d: preliminary net expenditure; e: estimated net expenditure.

The values for expenditure on continuing training include spending on adult education centres, further training for teachers, enterprise-based and sector initial and further vocational training, subsidies for political education, libraries, vocational academies, specialised academies and other continuing training.

Although the values in the table represent the few obtainable empirical data on public expenditure on continuing education and training, they do not permit any direct conclusions as to the proportion spent on continuing vocational training. Spending on continuing training for public service employees, guidance centres for continuing training and advertising for continuing training measures are not included.[80] Neither are tax losses as a result of deductions for continuing training. Also, the table includes values from items (e.g. libraries, occupational academies, other continuing training) whose inclusion as continuing training is inadmissible.[81] Therefore tables on public spending on continuing training by unit of government, as shown in the table, are only approximations.

The 'Foundation for the Advancement of Gifted People in Vocational Education and Training' and the ESF contribute significantly to the public funding of legally supported continuing vocational training. The foundation supports the continuing training of gifted young workers through the Advancement of Gifted People in Vocational Education and Training programme. Grants are awarded to young people with a recognised occupational qualification in accordance with the Vocational Education and Training Act or the Crafts

[80] Cf. Schmidt 1990, p. 93.

[81] Cf. Bardeleben/Sauter 1995, p. 34.

Code who are not older than 25 when accepted to the programme. In 1997 the foundation had at its disposal a total of DM 26 million (ECU 13.26 million) from the Ministry of Education.[82] The ESF aims to a) combat unemployment, b) facilitate access of young people and people facing social exclusion from the labour market, c) enable employees to adjust to changing production conditions, and finally d) promote equal opportunities. The fund's budget is supplemented by funds from the Member States and by public and private sector co-financing.[83] Table 13 gives information on the commitment of ESF funds for vocational training from 1994 to 1999, but does not provide information on the proportion of funds committed for initial vocational training and continuing vocational training.

Table 13 Commitment of ESF funds for vocational training from 1994 to 1999

Total ESF funds	Funds for vocational education and training	Funds per inhabitant
DM 13 627.88 million	DM 10 774.12 million	DM 133.28 million
ECU 6 953 million	ECU 5 497 million	ECU 68 million

Source: European Commission 1997, p. 115. Author's calculations. Rounded values.

Although various activities and special programmes, projects, networks and Community initiatives indicate that considerable funds from the ESF flow into vocational training, the scale of these forms of financing is by no means clear.[84]

3.3.3 Summary

The funding of legally based and publicly supported continuing vocational training is strictly prescribed in the relevant laws. The different government units finance any continuing vocational training that the law recognises as worthy of support from their tax and levy revenues. Funds are given as support to institutions and individuals and also as direct financing (grants) and indirect financing (tax benefits). Given the budgetary restrictions in the public sector, the merits of subsidising continuing vocational training provision have frequently been a subject of political controversy.

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[82] Cf. Secretariat of the Standing Conference of *Länder* Ministers of Education and Cultural Affairs 1997, p. 217.

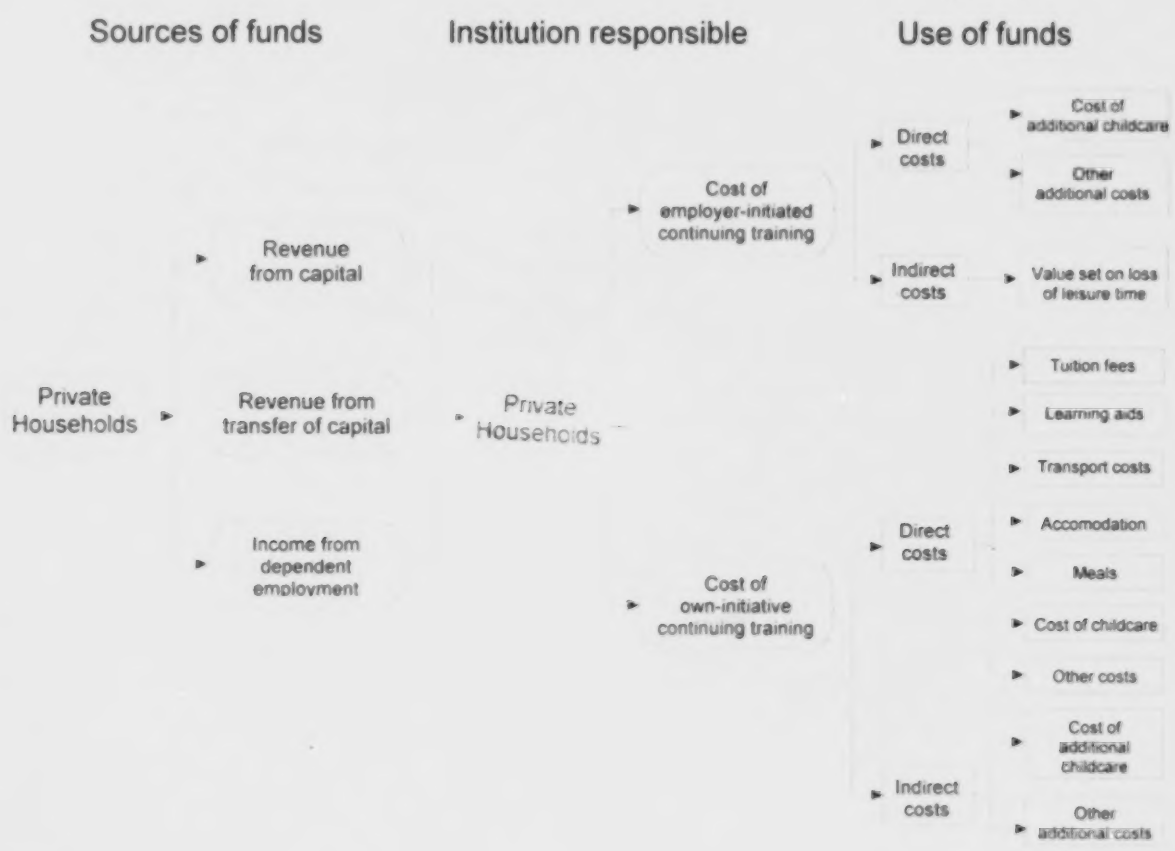
[83] Cf. European Commission 1997, p. 114.

[84] Cf. Kath 1996, p. 281.

3.4 Funding of individual continuing vocational education and training

The objectives of individual continuing training are primarily further training for occupational advancement, skills-related refresher courses and retraining. Participants are generally educationally motivated and performance-oriented employees. Measures are usually medium to long term and lead to recognised qualifications. Typical examples are correspondence courses, usually undertaken outside working hours, on the individual's own initiative and at his or her own expense. Most demand is from people who, independently of their institutional category, make use of offers by various providers on the continuing training market and at least initially pay for courses themselves. Figure 4 depicts the financial flows of individual continuing vocational training.

Figure 4 Financial flows of individual continuing vocational education and training



Source: Author's presentation

3.4.1 Sources of funding

Direct and indirect sources of funding can be identified for individually financed continuing vocational training. Direct sources of funding for private individuals are: recourse to current income; advances on future income (credit, loans); and transfer of capital (savings or inheritances). Theoretically indirect sources of funding can be identified, but no empirical statistics are available for them. It is certain that participants can claim tax relief only when they are liable to pay tax on income and are acquiring qualifications for a new occupation (special expenses) or are undergoing further training in their present occupation (income-related expenses).

3.4.2 Use of funds

The 1992 cost survey by the Federal Institute for Education and Vocational Training makes two distinctions which are usual in the cost theory of educational economy. One is the distinction between the direct and indirect cost of individual participation in continuing training. The direct cost includes fees paid for courses, the cost of learning aids, transportation to the site of continuing training and board and lodgings, childcare and all

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other expenses arising from participation. The indirect costs are opportunity costs - lost income from alternative occupational activity or the monetary value of lost leisure time. The other is the distinction between enterprise and employer-initiated and private or own-initiative continuing training. The share of costs covered by the participant depends on whether participation is on the individual's or the employer's initiative. This means that there is little or no cost to participants when the employer initiates continuing training, except for the cost of childcare when events are held outside working hours. In addition to these direct costs there is the indirect cost of lost leisure time. This was not included in the study, however. It also means that own-initiative continuing training, as would be expected, takes place at the individual's expense and entirely outside working hours. This can lead to a multitude of direct and indirect expenses with regard to private continuing training.

Individuals have specific means of refinancing their own costs. Direct costs can be passed on wholly or partially to other economic units, through a) grants under the Promotion of Labour Reform Act, b) reimbursement from employers or other bodies, and c) deductions from income tax for special expenses or income-related expenses. Options for refinancing indirect private expenses are, however, relatively limited. Those in dependent employment can claim maintenance payments from the Labour Office, and thus compensate part of their loss of income. Occasionally employers compensate loss of the leisure time invested in continuing training by granting special leave. Table 14 shows the cost of continuing training to the individual on the basis of structures of external/own-initiative and in-company/employer initiated continuing training costs after reimbursement in western and eastern Germany in 1992.

Table 14 Individual cost of external and in-company continuing training for 1992 after refinancing

	West	East
External/own initiative continuing training costs	DM 7 300 million	DM 1 900 million
	ECU 3 724 million	ECU 969 million
In-company/employer initiated continuing training costs	DM 400 million	DM 200 million
	ECU 204 million	ECU 102 million
Total costs for both types of continuing training	DM 7 700 million	DM 2 100 million
	ECU 3 929 million	ECU 1 071 million
Continuing training costs, total	9 800 million DM	
	5 000 million ECU	
In per cent of nominal GDP	0.32%	

Source: Bardeleben/Beicht/Herget/Krekel 1996, p. 52. Author's calculations. Rounded values.

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The table shows that in 1992 individual continuing training costs amounted to DM 7 700 million (ECU 3 930 million) in western Germany and DM 2 100 million (ECU 1 070 million) in eastern Germany, i.e. DM 9 800 million (ECU 5 000 million) in all. The survey points out, however, that this volume is the lowest estimate, since a stricter definition of continuing training was used in determining participation rates than in the cost study itself.[85]

3.4.3 Summary

Individual continuing vocational training is financed by the private resources of the participant. The net burden on individuals ultimately depends mostly on whether continuing vocational training is initiated by the individual or by the employer. Individuals bear a relatively small part of the cost of employer-initiated continuing training and a large share of the cost of own-initiative continuing training.

3.5 Conclusions

The German system of continuing vocational training can be summarised as follows:

- no single form of funding predominates, unlike enterprise-based initial training. It features a variety of implementing agencies and modes of funding;
- all forms of continuing vocational training funding are actually advanced funding, since it can be assumed that investors try to regain funds by transferring costs;
- all continuing vocational training funding is hybrid funding, since all investors share in financing by advanced financing and refinancing, and because of the non-appropriation principle of the German tax system.

Table 15 presents an overall summary of total expenditure on continuing vocational training.

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[85] Cf. Bardeleben/Beicht/Holzschuh 1994, pp. 9 et seq.

Table 15 Total expenditure on continuing vocational training

Investors	1986 a		1991 a		1996 b	
	absolute values	in %	absolute values	in %	absolute values	in %
Public Sector	-	-	-	-	-	-
European Union	-		-		-	
Federal government	DM 737 million	2.48%	DM 759 million	1.91%	DM 1 030 million	2.63%
	ECU 376.02 million		ECU 387.24 million		ECU 525.51 million	
Länder	DM 1 271 million	4.28%	DM 1 391 million	3.51%	DM 1 810 million	4.62%
	ECU 648.47 million		ECU 709.69 million		ECU 923.47 million	
Municipalities and promotional associations	DM 1 129 million	3.8%	DM 1 504 million	3.79%	DM 1 910 million	4.88%
	ECU 576.02 million		ECU 767.35 million		ECU 947.49 million	
Total	DM 3 137 million	10.56%	DM 3 654 million	9.22%	DM 4 750 million	12.13%
	ECU 1 600.51 million		ECU 1 864.29 million		ECU 2 423 47 million	
Private Sector	DM 26 558 million	89.44%	DM 35 985.6 million	90.78%	DM 34 398 million	87.87%
Enterprises	ECU 13 550 million		ECU 18 360 million		ECU 17 550 million	
Individuals	-	-	DM 7 315 million	-	-	-
	-		ECU 3 732.14 million		-	
Total	DM 26 558 million	89.44%	DM 35 985.6 million	90.78%	DM 34 398 million	87.87%
	ECU 13 550 million		ECU 18 360 million		ECU 17 550 million	
Federal Labour Office	-	-	-	-	-	-
	-		-		-	
Total expenditure	DM 29 695 million	100%	DM 39 639.6 million	100%	DM 39 148 million	100%
	ECU 15 150.51 million		ECU 20 224.29 million		ECU 19 973.47 million	
In per cent of nominal GDP	1.54 %		1.5%		1.1%	

Source: Author's calculations. Inconsistencies from rounding values.

Legend: Cf. Weiß 1990, p. 176; cf. Weiß 1996b, pp. 151; cf. Bardeleben/Beicht/Herget/Krekel 1996, p.52; cf. 1998 Labour and Social Statistics, Tab. 6.9 and 6.13. a: old [West German] *Länder*; b: all of Germany. The values for the overall cost of continuing training to individual enterprises reflect producer prices for industrial products in the 1987 survey of the Institute of the German Economy for the year 1986 and based on the 1992 survey of the Institute of the German Economy for the year 1991, and extrapolated for 1996. Private spending on continuing training reflects the cost of living of all private households in 1991 based on the 1992 Federal Institute for Vocational Education and Training survey. It was decided not to project the individual spending on continuing training from the 1992 Federal Institute for Vocational Education and Training survey on 1996 for methodological reasons. The result would be of doubtful validity.

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It is certain that enterprises will continue to provide and finance the greatest part of continuing vocational training. It remains an open question, however, whether enterprises will be willing and able to maintain or increase the level of their funding. It is unclear whether budgetary restrictions in the public sector will be reflected in a more restrictive support policy for continuing vocational training. Another issue is whether individuals will be able to maintain their present share of continuing vocational training financing. There are numerous signs that rising participation fees and the restriction of reimbursement by the labour administration will stunt the interest of individuals in continuing training. This might give the continuing training market an exclusive character. One controversial issue, which involves lack of market transparency, will leave its mark on future discussions. This is the standardisation and regulation of the continuing vocational training market and the value of the many certificates issued by different institutions.

Part 4 Initial and continuing training for the unemployed

4.1 Specific background

Germany's unemployed constitute a heterogeneous group of people that can be distinguished according to sex, nationality, social origins, initial vocational qualifications, previous occupational sector, length of unemployment and type of claim to public support. As far as this study is concerned, the most interesting distinction is between people who can claim public aid in order to update their labour skills and those who cannot, or can no longer, do so. In principle, the latter group is not excluded from the qualifications market. However, in practice their participation depends on personal or private sources of funding, on vocational training offered by public bodies, education providers such as churches, trade unions, local authorities, etc., or on institutions funded by compensatory diversification of fees (as practised by the adult education centres, for example). All that is known about this subsystem of financing vocational training activities of the unemployed is that it exists. For this reason, the following information is restricted to the area of publicly subsidised skills upgrading for the unemployed, which in Germany has always been regarded as a labour-market policy instrument and treated accordingly. Since no data have been systematically compiled until now on any *Länder* or local government programmes specifically for upgrading the skills of the unemployed, or on regional or local initiatives, the following description is limited to labour-market policy measures in accordance with the Labour Promotion Act.

Public subsidy of skills upgrading programmes for the unemployed is part of German public labour-market policy. Its strategies are derived from social-market-economy principles.[86] Skills upgrading programmes for the unemployed are an integral part of labour-market policies.[87] These policies are designed to correct structural imbalances in the supply and demand of qualifications in the labour market.

Upgrading the skills of the unemployed as a component of active labour-market policies is subordinate to the general goal of balancing the labour market as much as possible and the specific goal of reducing or eliminating partial structural labour-market imbalances. Active labour-market policies, which, in the 1990s, centre on skills upgrading for the unemployed, are closely linked to passive labour-market policies, inasmuch as unemployment insurance, which is organised as social insurance, is intended to protect workers from the material consequences of unemployment.[88]

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[86] Cf. Lampert 1994; cf. also Stein 1995.

[87] Cf. Lampert 1994, pp. 180 et seq.

[88] Cf. Stein 1995, pp. 108 et seq.

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When it was passed in 1969, the Labour Promotion Act initially focused labour-market policies on financial support for continuing vocational training for people in dependent employment. In view of the lack of skilled workers at the time, the aim was to avoid structural unemployment, which might be caused by technological developments and structural changes. Farsighted skills upgrading were intended to ensure that the structure of occupational activity was adapted to the current demand for skills and to promote individual flexibility through lifelong learning. The ultimate aim was to avoid stagnation due to skills bottlenecks. In the 1970s the number of unemployed started to rise steadily. The rapid rise in the number of long-term unemployed, in particular, led to considerable changes in labour-market policy. There was a departure from the original demand for preventive and forward-looking promotion of continuing training and a reactive call for the unemployed to adapt to the current demands of the labour market.[89] A series of amendments from the mid-1970s to the latest, in 1997, have restricted support of skills upgrading to increasingly narrowly defined groups of unemployed.[90] Where the objectives of active and passive labour-market policies are in competition, it affects subsidiary goals and the instruments for their implementation. Where the budget is constant, expansion of job creation schemes negatively affects funds for skills upgrading, and vice versa. Figure 5 shows the pattern of financial flows into skills upgrading measures for the unemployed.

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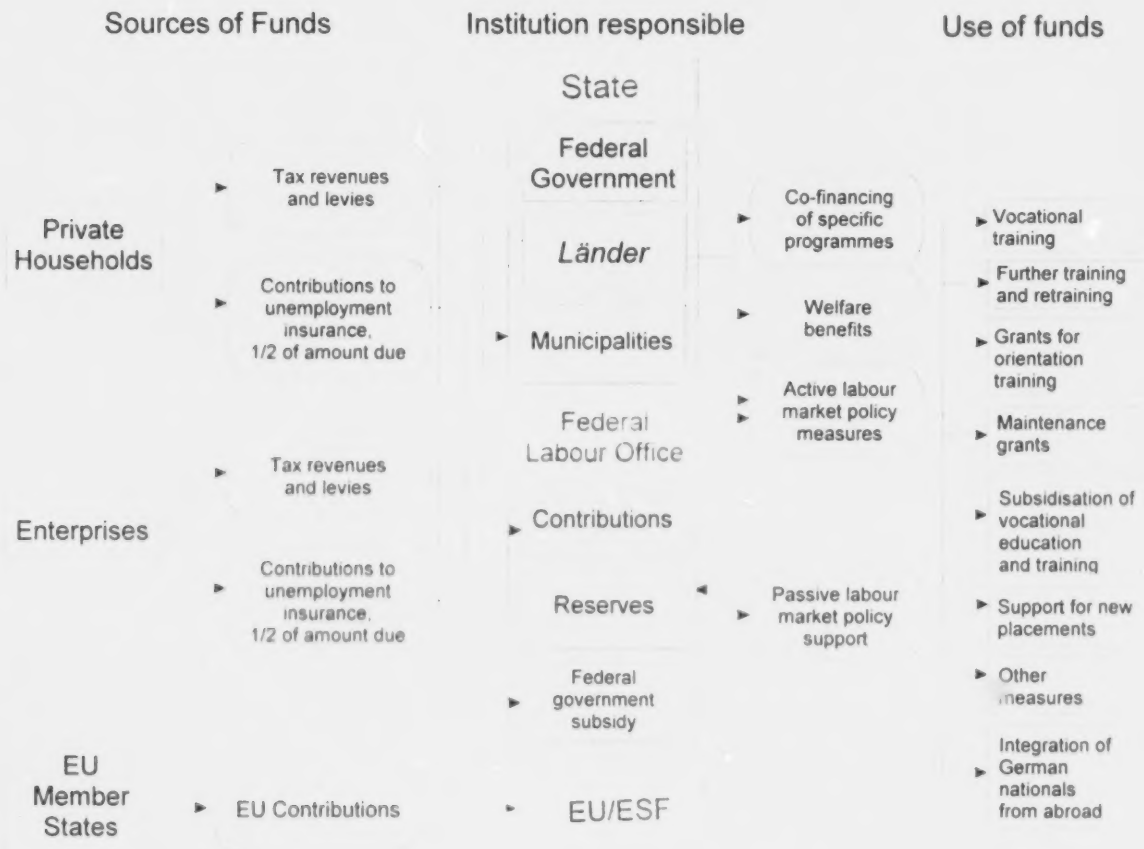
[89] Cf. working group on the Reform of the Labour Promotion Act 1995, p.117; cf. also Kühl 1996, pp. 210 et seq.

[90] Cf. section 3.1.

Figure 5 Financial flows into skills upgrading measures for the unemployed



Source: Author's presentation.

4.2 Sources of funding

Theoretically it would make sense to distinguish between direct and indirect sources of funding of skills upgrading programmes for the unemployed, too. In practice, however, there is little point, owing to a lack of reliable data. The main direct sources are contributions – paid in equal parts by employers and employees – to the unemployment insurance scheme. In 1986 they made up 92% of all Federal Labour Office income. In 1991 they amounted to 94% of its income, but in 1996 they contributed 'only' 80.5%. Whereas reserves from surpluses of previous years still yielded 15% of revenue in 1986, in 1991 they yielded only 0.1% and in 1996 almost nothing. The federal government subsidy, which has to be paid whenever the Federal Labour Office's own resources are insufficient to cover legally or politically required expenditure, fluctuated greatly in the past, as might be expected. In 1986 no subsidy was required, and in 1991 it made up 1.5% of total income. In 1996, however, it already accounted for 13.0%. The substantial contribution of the *Länder* and local governments, and any possible contributions by other organisations within the framework of regional or local qualification initiatives for the

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unemployed are sometimes mentioned in a general way in the literature. No mention is made of the scale of these contributions, however, so that at present it is not possible to comment on the volume of finance or to break it down into various sources.[91]

The same applies to the question as to what extent unemployed people in skills upgrading programmes contribute to the financing of these programmes, either from their own income or that of family members or partners. They always contribute when they participate in skills upgrading programmes but are not eligible for Federal Labour Office support. In this case, the participant has to bear both the indirect cost of the measure (i.e. loss of leisure time) and the direct cost (e.g. travel expenses, fees, and learning aids). No reliable data are available on the scale of this specific contribution to financing either. Since 1994 the ESF has also helped finance skills upgrading for the disadvantaged unemployed (the long-term unemployed and those threatened with long-term unemployment (including handicapped), young people with no job and no training, and particularly women without adequate qualifications and mothers returning to work).[92] Since this programme is designed to complement those of the Federal Labour Office, it is the Federal Labour Office that implements it. The individual facets of the programme are co-financed by the Federal Labour Office and the ESF. The volume of these funds makes little impact, however, in comparison with regular Federal Labour Office expenditure on skills upgrading. At present it amounts to just 2%.[93] No empirical data are available on indirect sources of funding to upgrade the skills of the unemployed. Further, information was not found on investment help for organisations or institutions, which provide skills upgrading programmes for the unemployed, nor was information available on low-interest loans to providers or participants. It is known, however, that people who participate in measures providing occupational skills can claim tax reductions for their private expenditure when they, or their partners, have taxable income and costs equal the cash outlay. Available statistics do not reveal whether this option has had any impact. Thus it is only possible to state generally that participants with taxable income can claim up to DM 2 400 (ECU 1 224.5) per annum as special expenses for skills upgrading measures when these lead to employment in a new occupation (e.g. retraining measures). A fixed sum (DM 2 400 or ECU 1 224.5) can be claimed as income-related expenses for private spending on skills upgrading for adaptation or advancement in the occupation for which a person is already trained, or the actual cost can be claimed on presentation of itemised evidence of greater expenses. Financial flows reflecting the labour-market policy of the Federal Labour Office for 1986, 1991 and 1996 are shown in the following table.

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91 Cf. for details Kühl 1996.

92 Cf Deeke/Hülser/Wulfinger 1997.

93 Cf. ibid., p. 55.

Table 16 Income and income structure of the Federal Labour Office 1986, 1991 and 1996

Income	1986 a	1991 b	1996 b
Contributions	DM 29 120 million	DM 67 080 million	DM 85 073 million
	ECU 14 857.14 million	ECU 34 224.49 million	ECU 43 404.59 million
Reserves (withdrawals)	DM 213 million	DM 707 million	DM 7 million
	ECU 108.67 million	ECU 360.71 million	ECU 3.57 million
Federal government subsidy	-	DM 1 025 million	DM 13 756 million
	-	ECU 522.96 million	ECU 7 018.37 million
Levies: Winter bonus and levies for payments before bankruptcy proceedings	-	-	DM 3346 million
	-	-	ECU 1 707.14 million
Other income	DM 2 317 million	DM 2 403 million	DM 3 406 million
	ECU 1 182.14 million	ECU 1 226.02 million	ECU 1 737.76 million
Grants from the European Social Fund b	-	-	DM 644 million
	-	-	ECU 328.57 million
Total income	DM 31 650 million	DM 71 215 million	DM 105 588 million
	ECU 16 147.96 million	ECU 36 334.18 million	ECU 53 871.43 million
In per cent of nominal GDP	1.64%	2.69%	2.98%

Source: Keller/Seifert 1995, Table 3, p. 21; Stein 1995, Tables 1 and 2, pp. 196 and 297; Annual Report of the Federal Labour Office 1996; Deeke/Hülser/Wulfinger 1997, p. 77. Author's calculations. Rounded values.

Legend: a: old [West German] *Länder*; b: all of Germany.

The table reveals the dynamic changes in income flows to the Federal Labour Office, which largely result from labour-market policy demands after the unification of Germany. The total volume of funds of the Federal Labour Office more than doubled between 1986 and 1991. In 1996 it was more than three times the 1986 amount. The main burden of this increase is borne on the one hand by contributors, whose contributions were raised considerably in the period under consideration, together with the assessment ceiling. As a result, income from contributions almost tripled between 1986 and 1996. 'Other income' and income from levies rose slightly, while the federal government subsidy increased substantially. Whereas there was no subsidy in 1986, it accounted for 1.5% of income in 1991 and 13% in 1996. The subsidy increased 13-fold between 1991 and 1996.

4.3 Use of funds

Funds accruing to the Federal Labour Office are used as stipulated or for the purpose designated in the Labour Promotion Act of 1969, which has been amended many times.

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Commentaries on the Labour Promotion Act agree that preventive full-time vocational education and training courses form its nucleus and represent its contribution to skills upgrading and the alleviation of hardship. Thus all measures focus on individual and institutional promotion of vocational further training for adjustment and advancement of retraining and orientation training.[94] Table 17 shows the uses to which Federal Labour Office funds are put and reflects the structural changes in labour market policies and, more particularly, the dwindling significance of previously central skills upgrading policies.

Table 17 Use of Federal Labour Office funds in 1986, 1991 and 1996 for active and passive labour market policies, without administrative costs

Labour market policy measures	1986 a	1991 b	1996 b
Total, active labour market policies	DM 13 013 million	DM 41 235 million	DM 39 995 million
	ECU 6 639 million	ECU 21 038 million	ECU 20 406 million
Further training and retraining	DM 2 121 million	DM 5 137 million	DM 5 556 million
	ECU 1 082 million	ECU 2 621 million	ECU 2 835 million
Grants for orientation training	-	DM 816 million	DM 97 million
	-	ECU 416 million	ECU 49 million
Maintenance payments	DM 2 301 million	DM 5 470 million	DM 10 138 million
	ECU 1 174 million	ECU 2 791 million	ECU 5 172 million
Subsidisation of vocational education and training	DM 40 million	DM 164 million	DM 22 million
	ECU 20 million	ECU 84 million	ECU 11 million
Total: Subsidisation of qualification measures	DM 5 051 million	DM 12 899 million	DM 18 381 million
	ECU 2 577 million	ECU 6 581 million	ECU 9 378 million
Other active labour market policy measures	DM 7 962 million	DM 28 336 million	DM 22 614 million
	ECU 4 062 million	ECU 14 457 million	ECU 11 028 million
Total, passive labour market policies	DM 14 573 million	DM 24 146 million	DM 57 959 million
	ECU 7 435 million	ECU 12 319 million	ECU 29 571 million
Total	DM 27 586 million	DM 65 381 million	DM 97 954 million
	ECU 14 074 million	ECU 33 358 million	ECU 49 980 million
in per cent of nominal GDP	1.43%	2.47%	2.77%

Source: Annual report of the Federal Labour Office 1986; annual report of the Federal Labour Office 1991; annual report of the Federal Labour Office 1996. Author's calculations. Inconsistencies from rounding values.

Legend: a: old [West German] *Länder*; b: all of Germany.

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[94] Cf. Kühl 1996, p. 210; cf. Stein 1995, pp. 57 et seq.cf. Keller/Seifert 1995; cf. also working group on the Reform of the Labour Promotion Act 1995, pp. 114 et seq.

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The table demonstrates that total expenditure by the Federal Labour Office on labour market policies rose by 255% from 1986 to 1996. It can be seen that in this period the emphasis has shifted from active to passive policies. Whereas spending on active labour market policies doubled, spending on passive policies tripled. Within the sphere of active labour market policy, spending on the following groups increased most: vocational training for hard-to-place young people (+360%), spending on maintenance allowances paid during orientation training, further training and retraining for the unemployed (+306%) and spending on wage subsidies (from DM 83 million to DM 2 237 million, or about 2 600%). Spending on further training and retraining did not keep pace in the observation period. While spending on initial and continuing training measures by the Federal Labour Office rose by slightly more than average between 1986 and 1996, from DM 5 000 million (ECU 2 550 million) to over DM 18 000 million (ECU 9 180 million) – i.e. about 262% – its share of total spending hardly increased at all (18.2% to 18.6%). Thus vocational skills upgrading has not increased to the same extent, in spite of a substantial rise in unemployment, especially hard-core and long-term unemployment. This means that a growing number of unemployed people are not eligible for vocational skills upgrading. To what extent regional, local or *Länder* skills upgrading programmes compensated for this deficit is not yet clear.

4.4 Conclusions

Skills upgrading for the unemployed can only be appreciated and evaluated in the overall context of labour-market policies and their instruments.[95] The unification of Germany and the ensuing rise in financial demands on labour-market policies, which have led to substantial growth in the federal subsidy, has stimulated thinking about a reform of the labour-market policies set out in the Labour Promotion Act.[96] The dilemma is how to reduce the federal budget and at the same time accommodate complaints from industry about high incidental labour costs, including contributions to unemployment insurance. In consequence there is political pressure to reduce spending on overall labour-market policies while also reducing revenue by lowering contributions.

One school of thought demands a conscious shift of emphasis away from passive and towards active labour-market policies, which should receive at least 50% of Federal Labour Office funds. The idea is to use a stronger combination of job-creating measures and qualification initiatives to foster employment and skills acquisition rather than financing unemployment. Greater co-financing of skills upgrading by *Länder*, local governments and employers is to increase Federal Labour Office income. The long-expressed demand to increase income by making all gainfully employed persons liable to pay contributions is also being revived. Self-employed people, farmers, public servants, freelancers and top-earners would then be compelled to pay contributions (the last-named

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[95] Cf. fundamental comments in Kühl 1996.

[96] Cf. working group on the Reform of the Labour Promotion Act 1995.

group by giving up exemption from compulsory insurance). This would mean that contributions could be reduced. Changing from wage and salary-related funding to value-added-related funding is also under consideration, although it is not certain whether this would bring the desired relief to enterprises, in particular.

Part 5 Combined training programmes

5.1 Combination programmes and employment societies

In Germany the concept of combining skills upgrading with employment programmes is almost unknown. The working group on the Reform of the Labour Promotion Act mentions combination solutions without providing details on the subject.[97] It only reports that in the new *Länder* it was possible for a time (until 1991) to combine short-time work and skills upgrading, and receive a higher short-time allowance. The same source reports that job creation schemes allow time for qualifying training (up to 20% of working time in the East and 10% in the West).[98] For a limited time it is also possible to combine skills upgrading and job creation by entering part-time employment in a job creation scheme while receiving a partial maintenance allowance for continuing training. No more detailed information is currently available on the scope of these combined programmes in Germany. Neither the annual reports nor the Official Gazette of the Federal Labour Office refer to them.

Employment societies, which have been established in the new *Länder* in particular, represent a special form of combined skills upgrading and employment.[99] In 1995 there were over 400 of these societies in the new *Länder*, employing approximately 150 000 people.[100] Enterprise-based employment societies aim to support employees threatened with unemployment in times of crisis, and help them find new areas of activity, if possible in their old enterprise. Local government employment societies hope to reintegrate unemployed people through a combination of measures and subsidies to organisations and institutions specialised in this field. Special features of these programmes are the combination of financial resources from various sources (such as the Federal Labour Office, company redundancy payment schemes, *Länder* structural funds and local governments) and the involvement of other labour-market policy players (works councils, trade unions, firms, local governments). However, the Federal Labour Office is extremely reluctant to support these societies, since it has focused on the support of individuals and has refused to become involved in structural policy-making up to now. Thus Federal Labour Office financing policies are regarded as a 'bottleneck' at present.[101] A description of the many types of employment society, especially in the new *Länder*, should not blind us to the fact that job creation and job security are their main focus, and not skills

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97 Cf. ibid., pp. 138 et seq.

98 Cf. ibid.

99 Cf. Bosch 1995; cf. also Hild 1995.

100 Cf. Brinkmann/Hiller/Völkel 1995, p. 479.

101 Cf. Bosch 1995, p. 90.

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upgrading measures, which are still a marginal concern.[102] The limited effectiveness of these societies is thought to be due to differences of opinion still existing among the social partners, the *Länder* governments and the *Treuhand* or its successor in the new *Länder*.[103]

The low overall impact of employment societies can be ascribed to the incompatible logic of subsidisation under labour market, economic and financial policies.[104] The Federal Labour Office contributes to, or assumes full payment for, only wage expenses or personal costs for skills acquisition. It grants hardly any material or investment aid. In contrast, investment aid is limited to recipients who can make some contribution, which is rarely possible. Finally, the *Länder* programmes often demand that employment societies should be non-profit organisations, which excludes them from economic support programmes and also from recognition by the Federal Ministry of Finance, so that in the end the societies receive no aid at all. Since no data are available to show the current volume of financial flows to or from employment societies, only the basic pattern of flows can be represented. Figure 6 illustrates financial flows funding employment societies.

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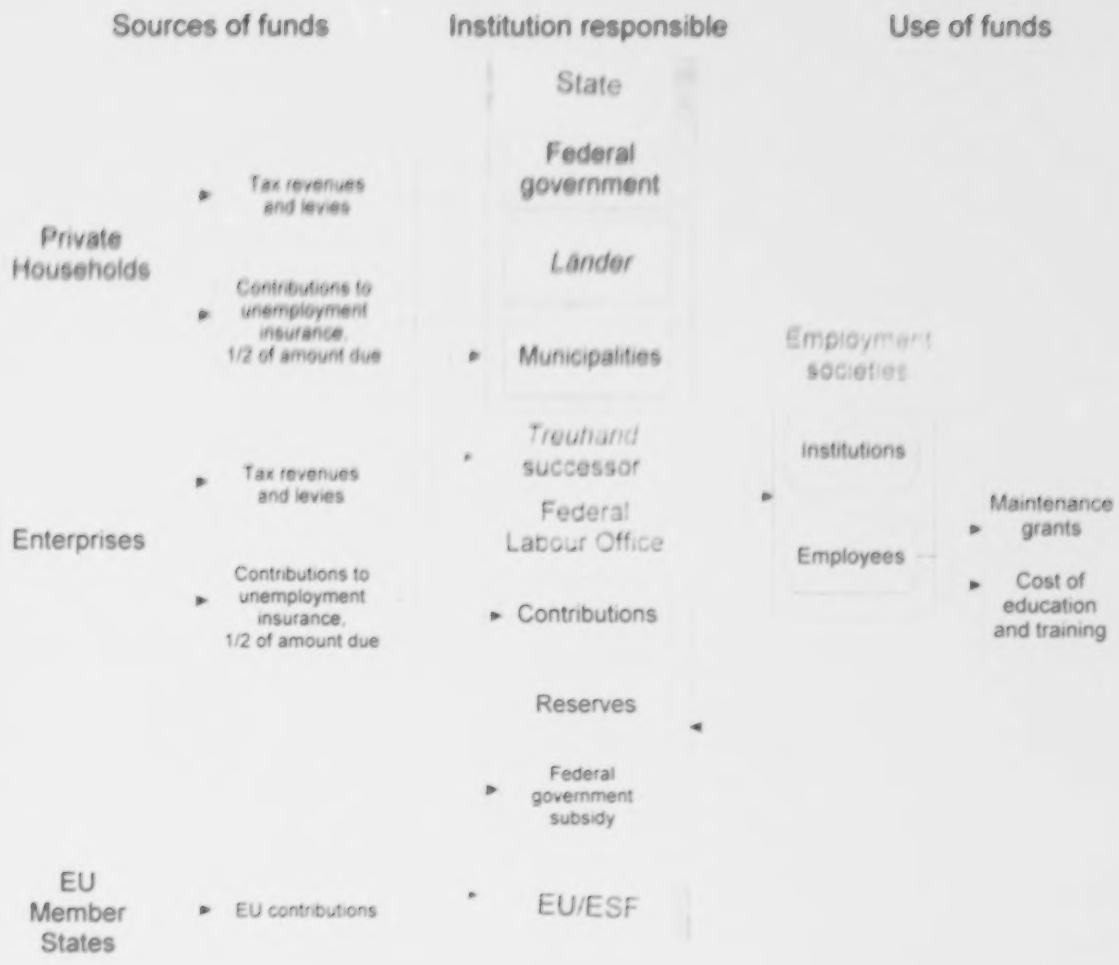
[102] Cf. Hild 1995.

[103] Cf. ibid., p. 503.

[104] Cf. ibid., pp. 511 et seq.

Figure 6 Financial flows funding employment societies



Source: Author's presentation.

5.2 Job rotation

A recent documentation shows that job rotation projects such as exist in Denmark and The Netherlands are still at a rudimentary stage in Germany.[105] Berlin alone launched a job rotation project to run from 1996 to 1999. It harnessed the European Community initiative ADAPT to release employees from small and medium-sized enterprises for skills upgrading. During this period and beyond, unemployed people replaced those taking part in the project. The cost of further training for the substitutes in the enterprises concerned is borne by the Federal Labour Office, as is their maintenance allowance. The employees released for continuing training continue to receive their pay from the enterprise, while the continuing training measure is financed from ADAPT funds together with money from the Berlin budget. The total amount allocated for the period 1996 to 1999 is DM 3.5 million

[105] Cf. Grünewald/Moraal 1998; cf. also Grünewald/Moraal 1996.

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(ECU 1.79 million). The greater part (68%) is ADAPT grants from the ESF, while the Berlin government's Department of Labour, Vocational Education and Training and Women's Affairs covers the remaining 32%. The size of the ESF subsidy varies between East and West Berlin. This funding is augmented by private resources for the salaries of the participating employees and Federal Labour Office funds for training and substitutes. No information is currently available on the scale of these funds. Although it remains to be seen how successful and effective job rotation schemes will be, it seems reasonable to predict that they will eventually prove more attractive and effective than employment societies.

Part 6 Future of vocational education and training funding

The funding and cost of initial and continuing vocational training are closely related, since funding (the acquisition of resources) precedes cost (the use of resources) and thus the issues of funding and cost are directly linked. Table 18 represents an attempt to compile something at least approaching total spending on vocational education and training in Germany from the available statistics. It may be assumed that the total expenditure presented for the benchmark years 1986, 1991 and 1996 represents only the lowest estimate of the actual figure.

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Table 18 Total expenditure on vocational education and training

Investors	1986 a		1991 a		1996 b	
	absolute values	in %	absolute values	in %	absolute values	in %
Public Sector	-	-	-	-	-	-
European Union	-		-		-	
Federal government	DM 869 million	1.11%	DM 1 147.6 million	1.05%	DM 1 317.4 million	1.24%
	ECU 443.37 million		ECU 585.51 million		ECU 672.14 million	
Länder	DM 6 889 million	8.78%	DM 7 934 million	7.25%	DM 10 644.89 million	10.01%
	ECU 3 514.8 million		ECU 4 047.96 million		ECU 5 431.07 million	
Municipalities and promotional associations	DM 2 582 million	3.29%	DM 3 252 million	2.97%	DM 3 383.43 million	3.18%
	ECU 1 317.35 million		ECU 1 659.18 million		ECU 1 726.24 million	
Total	DM 10 340 million	13.18%	DM 12 333.6 million	11.26%	DM 15 345.72 million	14.44%
	ECU 5 224.49 million		ECU 6 292.65 million		ECU 7 829.45 million	
Private Sector Enterprises	DM 63 089.4 million	80.39%	DM 76 952.78 million	70.28%	DM 72 578.49 million	68.27%
	ECU 32 188.47 million		ECU 39 261.62 million		ECU 37 029.84 million	
Individuals	-	-	DM 7 315 million	6.68%	-	-
	-		ECU 3 732.14 million		-	
Total	DM 63 089.4 million	80.39%	DM 84 267.78 million	76.96%	DM 72 578.49 million	68.27%
	ECU 32 188.47 million		ECU 42 993.77 million		ECU 37 029.84 million	
Federal Labour Office	DM 5 051 million	6.44%	DM 12 899 million	11.78%	DM 18 381 million	17.29%
	ECU 2 577 million		ECU 6 581 million		ECU 9 378 million	
Total expenditure	DM 78 480.4 million	100%	DM 109 500.38 million	100%	DM 106 305.21 million	100%
	ECU 40 041.02 million		ECU 55 867.54 million		ECU 54 237.35 million	
in per cent of nominal GDP	4.08%		4.14%		3.0%	

Source: Author's calculations. Inconsistencies from rounding values.

Legend: a: old [West German] *Länder*; b: all of Germany. Values are the sums of Tables 9 and 15 and total grants towards skills upgrading measure subsidies from Table 17. Public budget values from Table 9 are basic funds, whereas the values from Table 15 are net expenditure.

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The validity of data compiled on total vocational education and training expenditure is limited because of an empirical problem with lack of statistical deficit in this sphere and because of a theoretical problem emphasising the inadmissibility of adding public expenditure and enterprise costs.[106] Two problem areas underline that caution is required in interpreting the data presented.

The first problem relates to changes in total expenditure on vocational education and training in Germany. There is no linear relationship between expenditure and the quality or efficiency of vocational training.[107] Thus an increase or reduction in spending does not necessarily reflect an improvement or deterioration in the quality or efficiency of vocational training.[108] Changes in expenses can be due to shifts in age distribution, in the length of training or participation in training (quality structure), or to modifications in the teacher:pupil ratio or to changes in the price structure or general price levels (value structure).

The second problem relates to the possibility of refinancing vocational training spending or costs. It highlights the fact that the financing of vocational education and training produces specific structures which mean that investors and those who actually provide the funding are rarely identical. Open and hidden refinancing options separate those who make the payments from those who actually bear the funding burden or profit from returns. Three refinancing options can be distinguished in principle, but they do not apply equally to all investors:

1. refinancing through tax reductions or mitigation of tax liabilities. This option depends on a) the profit situation, b) paying profit-related taxes in the current period, and c) tax rates;

2. refinancing through passing vocational training costs on to selling prices or through including them to factor prices. This possibility depends in particular on a) elasticity of supply and demand,[109] b) competitive situation, and c) market position;

3. refinancing by internalising direct and indirect returns, during and especially after initial and continuing training. This option is primarily determined by a) productive periods, b) the income-generating potential of the training or production site, and c) the performance of the participant in initial or continuing training.

While plausibility considerations indicate that investors in vocational training bear only part of the cost, within the legal framework, pre-financing always entails substantial expenditure and costs, whereas the reduction of expenditure and costs by the various

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[106] Cf. comments in the Preface and section 1.5.

[107] Cf. deliberations of the Committee of Experts 1974, p. 8.

[108] Cf. Mattern 1979, pp. 14 et seq.

[109] Costs can be passed on to consumers in inverse proportion to the elasticity of demand, i.e. the more elastic the demand, the slimmer the chance of passing on costs.

means of refinancing is unreliable and must repeatedly be achieved in political or market competition. Enterprises pass their training costs on to other taxpayers via tax reductions or on to consumers via higher prices. Public spending by federal, *Länder* and local governments is covered by all taxpayers (enterprises, wage and salary earners, recipients of other income and consumers). The Federal Labour Office attempts to refinance its expenditure from unemployment insurance contributions and the federal subsidy, at the expense of all taxpayers, on condition that parliament can justify increasing contributions and the federal government can justify the demands on the federal budget. Individual trainees will pass their financial burdens on to other taxpayers via special expense or income-related expense claims. Incidence theory thus shows that consumers, taxpayers and wage earners contributing to unemployment insurance bear the cost and finance vocational education and training. Therefore, individuals and private households – to varying degrees – could be regarded as ultimately covering the bulk of the cost of vocational education and training in Germany.[110]

Based on the trends of the past ten years, the following predictions for the financing of initial and continuing training would appear realistic.

Many things indicate that the discussion on training levies within the framework of a central training fund will continue. In February 1998 an opposition party's legislative initiative for alternative financing of enterprise-based training was debated in an official hearing of the German parliament. Criticism of financing by individual enterprises comes primarily from the German Trade Union Federation (DGB), the German Social Democratic Party (SPD), the Green Party (*Bündnis* 90/Die Grünen) and the Democratic Socialist Party (PDS). This form of financing is supported by the leading organisations of German industry, in particular, and by the former governing coalition of the Christian Democratic Union (CDU), the Christian Social Union (CSU) and the Free Democratic Party (FDP). The DGB national executive committee claims that a sufficient supply of initial vocational training places has not been guaranteed for several years, requiring creation of a legally prescribed system of burden sharing between training and non-training enterprises and administrative bodies.[111] The SPD draft Law emphasises the widening gap between shrinking supply and growing demand for training places. This accentuates the necessity for legislation to ensure that 'all private and public sector employers collectively offer a choice of vocational training for all young people seeking training opportunities, and provide the funds needed for this purpose, if necessary by means of levies.'[112] In their draft Law, Bündnis 90/Die Grünen criticise industry for not having fulfilled its training obligations for years. With the result that theory and practice diverge widely and federal regulations are needed to 'help save the quality and quantity of the dual training system at home, a system which has received international acclaim, and at the same time to promote social harmony in this country'.[113] The PDS draft Law emphasises that society's

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[110] Cf. Timmermann 1994, pp. 119 et seq. cf. also Berger/Ehrmann 1989, pp. 116 et seq.

[111] German Federation of Trade Unions 1998, p. 6.

[112] SPD Bill 1997, p. 7.

[113] Bündnis 90/Die Grünen 1997, p. 2.

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goal of providing all young people with quality training is no longer realistic within present structures, and therefore an 'equalisation of burdens between training and non-training enterprises must be achieved, in order to stop enterprises withdrawing from training.'[114] Conversely, the Committee of German Industry, as joint organisation of the most important industrial associations, claims that industry will continue to fulfil its training obligations in the coming years and that it is also important 'to further develop the dual system of training based on financing by individual enterprises.'[115] The CDU/CSU and FDP welcome industry's declaration of intent to bring about a balance on the training market, and point out that the German parliament opposes a training levy, viewing it as counter-productive for Germany as a business location. 'It would be a job creation measure for bureaucrats and not establish a single new training place.'[116]

The main aims of the draft Laws are a) to ensure a supply of training places sufficient to meet the demand for enterprise-based training, through b) involving non-training enterprises in the financing of enterprise-based training by means of a levy, which would be collected from all or almost all enterprises, based on an assessment. The industrial associations, which expressed their views through the Committee of German Industry categorically, reject any form of comprehensive levy controlled by a central fund to finance vocational training. They fear it would mean a fall in the supply of training places (employers might 'buy out' of training), would disproportionately burden small and medium-sized enterprises, thus also putting jobs at risk, and would mean higher administrative costs. Instead of levy financing, they plead for limiting training costs (by putting a ceiling on training remuneration and more intensively exploiting the workplace as a learning site), for speedily creating new occupations in the service sector, for increased differentiation of occupational profiles based on level and duration of training, for rapid updating of training occupations, for a more enterprise-friendly organisation of part-time vocational school instruction and for appealing to enterprises to provide training.

The issue of levy financing and its chances of implementation thus remain open at present. Parallel trends are more clearly defined. It may be assumed that the various forms of cooperative training, and thus financing through company cooperatives, will become more common in both the old and new *Länder*. However, it is still possible that other sectors will reach collective training agreements between the social partners to wholly or partially finance enterprise-based training. School-based training workshops, and their funding, would then gain even more importance. In the new *Länder* – especially in the north – the trend towards filling the training supply gap with full-time schooling (centres for upper secondary education) is taking shape, particularly in the *Land* Brandenburg. This will necessitate a shift in the financing structures of initial vocational training in these *Länder*, with more pressure on *Länder* and municipal budgets. Increased subsidisation of school-based training institutions from public funds would also raise the level of State funding for vocational training. At the end of 1998 the new governing coalition – SPD and

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[114] PDS 1997, p. 2.

[115] *Kuratorium der Deutschen Wirtschaft* [Committee of German Industry] 1997, p. 2.

[116] CDU/CSU/F.D.P. 1997, p. 2.

Bündnis 90/Die Grünen – introduced a special training programme to give 100 000 young people a job or training opportunity. Although it is not yet completely clear how this special training programme will be implemented, it is certain that the programme will run for several years and be financed entirely from public funds to the sum of DM 2 000 million (ECU 1 020 million).

In view of the large staffs needed in schools for vocational education and training, and the resulting burden on their budgets, the Ministries of Education and Cultural Affairs of almost all the *Länder* are attempting to reduce personnel spending. At present 80% of public expenditure on vocational schools goes on personnel.[117] One common method of reducing expenses is to raise the weekly workload of each teacher by one or two hours. A second method is to increase the size of classes and thus the pupil:teacher ratio. Both methods reduce expenditure on personnel by reducing the number of teachers needed. A third method reduces teachers' starting salaries and the salaries for trainee teachers. A fourth method recently introduced in North Rhine-Westphalia allows trainee teachers to teach up to six hours a week without supervision, substituting cheaper trainees for expensive teachers. In addition, local authorities are increasingly financing teaching materials for schools from their budgets. In the long term some Ministries of Education are looking to budget personnel expenses and change the status of teachers from civil servants to employees. This would mean changing the relevant federal and *Länder* legislation on civil servants and their remuneration. All education policy-makers agree that school efficiency must be increased, and that there should be no school fees.

The sphere of continuing vocational training will experience a general trend towards financing indirect costs by participants themselves, especially by increasingly providing continuing training activities during leisure time. Collective agreements will reinforce this tendency towards privatised self-learning phases and leisure time training. In segments of the employment system which are creating new and more flexible forms of employment and work organisation, such as teleworking and especially the new forms of self-employment, continuing vocational training will increasingly become the responsibility of the individual alone. This will mean that workers have to finance their own continuing vocational training. Where enterprises do help finance continuing vocational training for their staff or their commissioned workers, aid will increasingly be in the form of company grants towards training.

Public subsidisation of continuing training will concentrate on activities, which are recognised as being a public priority. Re-defining public interest will promote the trend towards rising fees and personal and private financing, with the implicit danger that more low-income households will become excluded from this segment of continuing vocational training.

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[117] Cf. Secretariat of the Standing Conference of *Länder* Ministers of Education and Cultural Affairs 1997, p. 96.

In the next few years aid to continuing vocational training for the unemployed will (of necessity) concentrate even more on measures to combat long-term unemployment, since it seems unlikely that the rate of hard-core unemployment will fall rapidly, if it falls at all. This will reinforce the reactive character of continuing vocational training and labour market policies in this sector. On the other hand, combination programmes, especially job-rotation schemes, will presumably gain appeal and support. They will offer a perspective for occupational integration to young people whose transition to the employment system is in doubt, and to the long-term unemployed. Little will change with regard to the para-fiscal financing of continuing vocational training through the Federal Labour Office, although the positive effects of integrated continuing training, labour-market and employment policies are expected to be distinctly greater than in the past.

Part 7 List of abbreviations and German institutions

Abbreviations

ADAPT	Community initiative on adaptation of the workforce to industrial change
Cedefop	The European Centre for the Development of Vocational Training
ESF	European Social Fund
FORCE	Formation Continue en Europe
GDP	Gross Domestic Product
ISCED	International Standard Classification of Education

Institutions

Central Association of the German Building Trade
Zentralverband des Deutschen Baugewerbes e.V.

Christian Democratic Union
Christlich Demokratische Union (CDU)

Christian Social Union
Christlich Soziale Union (CSU)

Committee of German Industry
Kuratorium der Deutschen Wirtschaft

Construction Workers' Trade Union
Industriegewerkschaft Bau-Steine-Erden

Federal and *Länder* Committee for Educational Planning and Research Promotion
Bund Länder-Kommission für Bildungsplanung und Forschungsförderung (BLK)

Federal Institute for Vocational Education and Training
Bundesinstitut für Berufsbildung (BIBB)

Federal Labour Office
Bundesanstalt für Arbeit (BFA)

Federal Ministry for Education, Science, Research and Technology
(abbreviated: Ministry of Education)
Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie
(BMBF)

Federal Ministry of Economics
Bundesministerium für Wirtschaft (BMW)

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Foundation for the Advancement of Gifted People in Vocational Education and Training
Begabtenförderungswerk berufliche Bildung

Free Democratic Party
Freie Demokratische Partei Deutschlands (FDP)

German Trade Union Federation
Deutscher Gewerkschaftsbund (DGB)

Institute for Labour Market and Occupation Research
Institut für Arbeitsmarkt- und Berufsforschung (IAB)

Institute of the German Economy
Institut der deutschen Wirtschaft (IW)

Land (pl. *Länder*) – a constituent state of the German federation

Länder and city parliaments
Land- und Städtetagen

Party of Democratic Socialism
Partei des Demokratischen Sozialismus (PDS)

Social Democratic Party of Germany
Sozialdemokratische Partei Deutschlands (SPD)

Standing Conference of *Länder* Ministers of Education and Cultural Affairs
Kultusministerkonferenz (KMK)

Treuhand – the trust organisation responsible for privatisation in the former GDR

Part 8 Legal provisions

1. Legal background to Initial Vocational Training

Initial training in enterprises is regulated by the following federal Laws and regulations, which affect it directly or indirectly.

1. Article 12 (1) of the Basic Law (*Grundgesetz* - GG) of 23.5.1949, which prescribes free choice and practice of occupations.
2. Article 72 (2) of the Basic Law, as amended on 23.11.1994, which confers on the Federation the right to legislate on vocational education and training.
3. Article 74 (1) No 11 of the Basic Law of 23.5.1949, under which the concurrent legislative powers of the Federation extend to economic matters.
4. Article 74 (1) No 12 of the Basic Law of 23.5.1949, under which the concurrent legislative powers of the Federation extend to labour law.
5. The Vocational Education and Training Act (*Berufsbildungsgesetz* - BBiG) of 14.8.1969, which, together with Article 74 (1) Nos 11 and 12 of the Basic Law and the Unification Treaty of 23.9.1990, last amended by the Labour Law for the Promotion of Growth and Employment (*Arbeitsrechtliche Gesetz zur Förderung von Wachstum und Beschäftigung*) of 25.9.1996, establishes the framework conditions for vocational training, which come under economy and labour laws.
6. Promotion of Vocational Education and Training Act (Berufsbildungsförderungsgesetz - BerBiFG) of 1.1.1982, amended on 26.4.1994, which regulates vocational education and training planning, reporting and statistical documentation.
7. Industrial Constitution Law (Betriebsverfassungsgesetz - BetrVerfG) of 15.1.1972, last amended in the Labour Law for the Promotion of Growth and Employment of 25.9.1996, which prescribes the participation rights of works councils in promoting and implementing training measures.
8. Law Regulating Crafts Trades (Crafts Code) (Gesetz zur Ordnung des Handwerks - Handwerksordnung, HwO) of 28.12.1965, last amended in the Law to Integrate the Law on Statutory Accident Insurance into the Social Security Code (Gesetz zur Einordnung des Rechts der gesetzlichen Unfallversicherung in das Sozialgesetzbuch - SGB) of 7.8.1996, which regulates vocational training in greater concurrence with the Vocational Education and Training Act in crafts trades.
9. Protection of Young People in Employment Act (Gesetz zum Schutz der arbeitenden Jugend - JArbSchG) of 12.4.1976, last amended by law of 24.2.1997, contains particular protective regulations for trainees and young employees and rules that vocational school attendance may not lead to training remuneration deductions.

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10. Promotion of Labour Reform Act (Arbeitsförderungsreformgesetz - AFRG) in the Social Security Code, Volume III, of 1.4.1997, which regulates institutional and individual support for the unemployed and of those threatened with unemployment.

11. Instructors' Aptitude Ordinance (Ausbilder-Eignungsverordnung – AEVO) of 20.4.1972, amended for the various sectors by ordinance, which in conjunction with Paragraph 20 (2) No 3 of the Vocational Education and Training Act and Paragraph 21 (2) No 3 of the Crafts Code prescribes standards for the occupational and work-related teaching abilities of instructors.

The legal basis for vocational schools are the following *Länder* laws which directly or indirectly affect public initial training in schools with a vocational orientation:

1. Article 7 (1) of the Basic Law of 23.5.1949, under which the entire educational system is under the supervision of the State.
2. Article 30 of the Basic Law of 23.5.1949, which prescribes that the exercise of governmental powers and the discharge of governmental functions be incumbent on the Länder because of the Federal structure.
3. Articles 70, 71, 72, 73, 74 and 75 of the Basic Law of 23.5.1949, which confer the right to legislate on educational matters on the Länder, leading to divergent legislation on compulsory schooling and school administration, financing and participation rights.

2. Legal Basis for Continuing Vocational Training

The most important federal laws and ordinances affecting continuing vocational training are:

1. Vocational Education and Training Act of 14.8.1969, as amended on 25.9.1996, under which vocational further training is structured and organised in further training and chamber regulations, and retraining in retraining regulations.
2. Promotion of Vocational Education and Training Act of 1.1.1982, amended on 26.4.1994, which regulates vocational education and training planning and statistical documentation, and the work of the Federal Institute for Vocational Education and Training.
3. Industrial Constitution Law of 15.1.1972, last amended on 25.9.1996, which confers on the works councils the right of consultation, participation and co-determination in continuing training issues.
4. Crafts Code of 28.12.1965, last amended in the Social Security Code of 7.8.1996, which controls continuing training in crafts trades in conjunction with the Vocational Education and Training Act.

5. Promotion of Labour Reform Act in the Social Security Code, Volume III, of 1.4.1997, which, given the priority of integrating the unemployed into the primary labour market, prescribes the priority of placement for the unemployed over recourse to labour promotion benefits and defines individual and institutional eligibility for support of occupational further training, occupational retraining and orientation training.

6. Promotion of Advanced Training Law (Aufstiegsfortbildungsförderungsgesetz – AFBG) of 1.1.1996, which confirms the right to State support for skilled workers who have completed initial vocational training.

7. Protection of Distance Learning Act (Fernunterrichtsschutzgesetz – FernUSG) of 24.8.1976, last amended in the Law for the Amendment of the Civil Code and other Laws (*Gesetz zur Änderung des Bürgerlichen Gesetzbuches und anderer Gesetze*) of 27.4.1993, which regulates the licensing and form of contract of correspondence courses.

Länder laws affecting continuing vocational training are:

1. Continuing training and adult education laws, some of which control the subsidisation of general, political and vocational continuing education and training events.

2. The Länder education laws and framework agreements of the Standing Conference of Länder Ministers of Education and Cultural Affairs, which regulate continuing education and training in specialised schools.

3. Educational Leave laws (Bildungsurlaubsgesetze), which are in effect in 11 Länder at present. They guarantee employees' entitlement to limited release from work to participate in continuing education and training and ensure uninterrupted wage or salary payment.

Part 9 Glossary

Chamber contributions
are vocational-training-related contributions made by enterprises to the appropriate Chambers of Industry, Commerce, Trade, Agriculture or other.

Competent Bodies
are corporations under public law, are responsible for controlling and monitoring training in enterprises. The Vocational Education and Training Act determines which authorities are responsible for enterprise-based training in specific occupations and occupational fields. These are the Chambers of Industry, Commerce and Trades for the different industrial and occupational sectors and the various federal and Länder authorities for the public sector. The Competent Bodies carry out comprehensive monitoring, promotion, licensing, recognition and examination tasks.

Continuing Vocational Training
is the resumption of vocational education and training after completion of initial vocational training. Continuing vocational training can be defined in different ways. It can be restricted to institutionalised learning or include 'softer' forms such as participation in conferences etc.

Direct cost
can be directly attributed to the person bearing the cost.

Dual system
refers to a specific combination of enterprise-based training and part-time vocational school, with their different regulations, management and funding. It is distinctive of the German, Austrian and Swiss educational systems.

Economically active population
refers to all persons over 15 years old who are in work, irrespective of the amount earned or the hours of work, or who are looking for work.

Full costing
is the allocation of all fixed and variable costs of a particular period to training – i.e. both the costs directly pursuant to training and imputed costs (personnel and material costs) only partially attributable to training. Opposite of variable costing.

Funding (Financing)
refers to the procurement of liquidity or the power of control over resources.

Gross cost
refers to the sum of all vocational training costs (of an enterprise, a sector, a training occupation or a continuing training measure) in a certain period, without taking possible returns into account.

Imputed cost
is one which corresponds to neither payments or outlay, but is calculated on the basis of the idea of opportunity cost, in order to express scarcity of resources.

Indirect cost
cannot be directly attributed to the cost bearer.

Individual cost
is the cost of vocational training to the individual (trainee, participant in continuing training).

Initial Vocational Training
includes all vocational training courses which follow the phase of general education and lead to a vocational training certificate (either from a vocational school or in the dual system).

Labour force participation rate
refers to the percentage of economically active persons in the resident population.

Net cost
occurs when the gross cost of vocational training is greater than the returns.

Net expenditure
Net expenditure of public budgets is the direct expenditure, after correction for payment transactions between units of government, and includes the outlay of each unit from its own sources of revenue.

Opportunity cost
is imputed cost which expresses the scarcity of means by balancing the benefits or returns of a second-best alternative which was not chosen against the cost of the chosen alternative.

Opportunity returns
are imputed returns which occur when cost is reduced.

Persons in dependent employment
refers to all persons over 15 years old who are in gainful employment, irrespective of the amount earned or the hours worked.

Principle of non-appropriation
is a fundamental budgetary principle of the cameralistic system of management of state finances, according to which taxes may not be earmarked for specific purposes, but all income must be used to cover all expenditure.

Productive periods
are the time per day spent in producing marketable goods or services during training.

Productive returns (and net cost)
is the training returns from productive learning in the workplace (sometimes also in the training workshop). Subtraction of productive returns from gross cost gives net productive returns.

Quantity structure of costs and returns
In addition to their value structure, costs and yields of vocational training have a quantity structure which consists of the number of input types which are used and consumed in the production process (cost aspect) or of the number of productive hours during initial and continuing training (returns aspect).

Refinancing
refers to the options a transactor has to replace liquid assets spent on vocational training.

Unemployed
All persons able and willing to work who have not found employment.

Value structure of costs and returns
describes the stated amounts or prices at which consumed (cost aspect) or produced (returns aspect) resources are valued.

Variable costing
excludes the imputed cost of training management and part-time instructors, in contrast to full costing.

Vocational training returns (and net cost) from recruitment
expands the returns and net cost model by including a second group of opportunity returns which occur when the cost to enterprises of external personnel recruitment is reduced through initial and continuing training.

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The financing of vocational education and training in Germany

Financing portrait

Most initial vocational training in Germany takes place in the dual system of company and vocational school. The dual system is funded primarily by individual companies, but sectoral and social partner funds and joint funding are playing an increasingly important role. Vocational schools are funded from the budgets of the Länder (states) and the local authorities. For continuing vocational training, however, the multitude of promoters and sponsors means that no one mode of funding predominates; funding for continuing vocational training in Germany comes not only from companies, the Bundesanstalt für Arbeit (Federal Labour Office) and public funds but also from individuals. Current trends do not point towards political majorities in favour of radical changes in the modes of financing vocational training.

The macro-economic data collected in this financing portrait are of limited value because the scarce statistics on vocational training provide little insight into the expenditure, cost and funding structures of vocational training.

Stefan Hummelsheim, Prof. Dr. Dieter Timmermann

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